ADVENTURES OF FUTURE SCIENCE

WONDER Stories

December

A GERNSBACK PUBLICATION

HUGO GERNSBACK Editor

"EVOLUTION SATELLITE"

by J. Harvey Haggard

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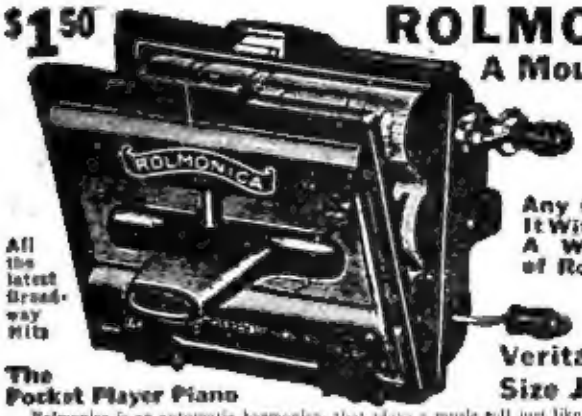

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SANE SEX LIFE

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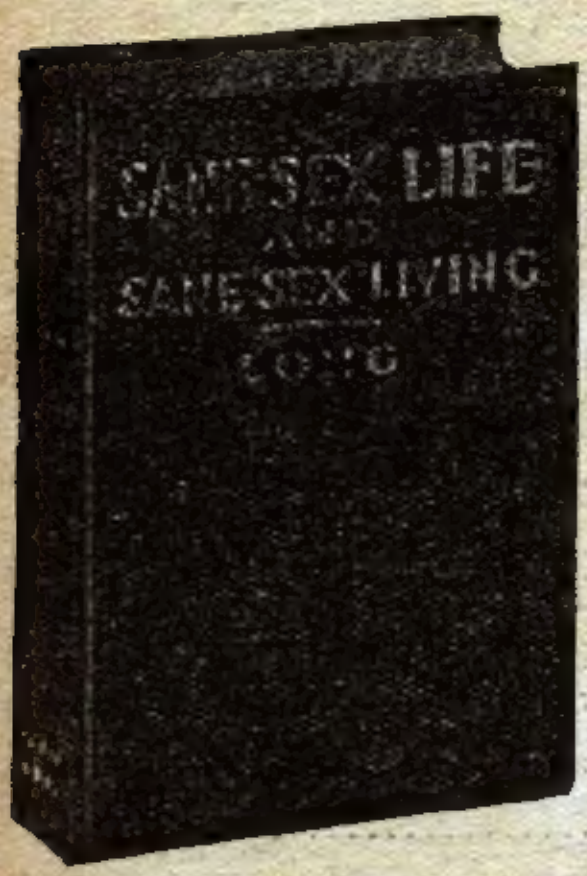

Recently, Judge August Dreyer ruled that a book which tells the truth about sex, by a physician, is not obscene. In rendering his decision, Judge Dreyer called attention to the fact that "Sane Sex Life" is highly endorsed by a former Commissioner of Health of New York City, by a Director of Public Welfare, ministers of every faith, prominent doctors, and by well-known educators.

"You Can't Suppress the Truth!" Says the Judge

In his decision Judge August Dreyer said, in part: "I have read through this book ('Sane Sex Life') not once but twice . . . . The first question that struck my mind was: Are the statements therein contained true? If they are true, how can you stop publishing the truth? . . . . The truth is justification . . . . I have made up my mind that we must not lose sight of the fact that books like . . . . 'Sane Sex Life' are written for persons of normal mind."

Until recently only physicians could get copies of "Sane Sex Life" and the price to them was $5.00. Husbands and wives who learned of the book through physicians were so eager to obtain the valuable knowledge it contains that they gladly paid from $7.50 to $25.00 for a copy. But now, in order that every person who needs the helpful knowledge of "Sane Sex Life" may obtain the book, the publishers offer a special authorized edition for only $2.00. It is *complete* and *unexpurgated*.

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"Sane Sex Life" is as different from other books on this subject as day is from night. Where other books leave off, this book begins. It is the only book available which explains the correct habits to be followed in the most essential factor in marriage. Marriage is far too important to be left to the mercies of the brute instincts, or to the hazards of mistaken methods. Men and women should know ALL the facts, ALL the truths about the art of Love in Marriage.

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Today I received a kindly letter from Doctor . . . . . former Commissioner of Health, highly recommending Dr. Long's book. It is very gratifying that such a valuable book is now within the reach of all.
Rev. F. G. C. . . . Maryland

"Sane Sex Life" is the most valued book I own. Of all the books I've read, this is the first of its kind that deals with the facts so plainly. Nowhere else have I found so much real information.
F. G. S. . . . . Texas

"Sane Sex Life" should certainly be in the hands of every young married couple to guide them along a path of which they have no knowledge. I am very glad to add my testimony and am only sorry that I did not have such information when I was married.
R. S. T. (Professor)
New York

Partial Contents

Problems of Sex Life
Necessity for the Information
Correct Mental Attitude
Sex Organs and Their Functions
Advice to Newlyweds
Marital Union
Art and Practice of Love Stimulation
The Perfect Sex Act

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ON THE COVER this month we see Gade Williams and Bob Mobart destroying an attacking evolutionary monstrosity of the Satellite Number One of Uranus. (From "Evolution Satellite," by J. Harvey Haggard.) Cover by Paul.

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WONDER STORIES *are everywhere*—
If you know where to find them!

BELIEVE It Or Not, real wonder stories are going on day and night, and right now, more wonder stories are happening all around you than you will find in the pages of this magazine.

While you are reading this, music, speech, talk, which originated perhaps 12,000 miles away from where you are, is vibrating in your body, only you don't know it.

But the short wave fraternity all over the world knows this, and for a few paltry dollars they rig up in their own homes a short wave set which brings in stations from the Antipodes. Such sets cost as low as $6.20, believe it or not. So if you are looking for real wonder stories, they are in the making right along.

How can you listen to Sydney, Australia; to Berlin; to Moscow; London, day in and day out, at practically no cost at all? Just get the catalog, which is a veritable encyclopedia of facts, described below, and you will be writing your own wonder stories.

Here are a few samples of actual wonder stories told by actual listeners:

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The first day without any trouble I received Spain, England, France, and other foreign countries. Amateurs! why I never knew there were that many until now. With the one tube Oscillodyne, I bring in more stations on one plug-in coil than with a set of coils on different short wave sets.

IF ANY ONE IS TRYING HIS LUCK ON SHORT-WAVE SETS, IT WILL BE WORTH WHILE TO CONSTRUCT THE ONE TUBE OSCILLODYNE.

PAUL KORNEKE, JR. N. S.
Pittsburgh, Pa.

FOREIGN STATIONS GALORE

It may interest you to know that yesterday, on my Doerle short wave set at 12:45. P.S.T., I heard CFH at Rio de Janeiro. They came in at 10220 Kcs. and the announcing voice was as clear and strong as on an ordinary telephone.

I am using just 45 volts for both detector and audio stage on the plate. What it would do on 90 volts on the audio I do not venture to say.

At the moment 10.35 P.S.T., I am listening to phone from Japan to Hawaii. No station identification however. Around 16.030 K.C.S. KKD—Kauhuku Hawaii just identified his station.

HARRY V. DAVIS,
Penticton, B.C., Canada.

THE WHOLE WORLD

In the past two days I brought in with my Oscillodyne S-W Set the following foreign stations: 12RO, DJC (this with such volume that I was able to plug in the loudspeaker) and a French station which I was unable to identify, but I believe it to be FYA Pontoise, and also another German station which I have not been able to identify as yet.

On Wednesday EAQ was weak and noisy and DJC was loud and clear, but on Thursday the conditions were reversed. I have received many United States stations, such as W9XAA, W9XF, W8XK, W2XE, etc., etc.

In Short Wave Craft, this set was called A WONDER SET, and I certainly agree.

C. W. KNIERIM,
Hollis, L. I., New York.

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THE increasing demand by our readers for new titles to be added to the SCIENCE FICTION SERIES has now been met. Six new books have been published and are now ready. Many new authors have contributed excellent stories which you will enjoy reading. A short summary of the new titles will be found below.

These new books, as usual, are printed on a good grade of paper, and contain brand new stories never published before in any magazine.

Each book (size 6 x 8 inches) contains one or two stories by a well-known science fiction author.

The Titles Are:

13—MEN FROM THE METEOR
by Pauzie E. Black

In the unexplored heart of Australia lay the bizarre and cruel civilization of the meteormen. And into their midst came the two men from Outside, to pit their puny strength against the meteormen's power.

14—THE FLIGHT OF THE AEROFIX
by Maurice Renard

Renard is the H. G. Wells of France. With sly humor and yet grim reality he describes the most unusual and startling flight made by man. An entirely new type of transportation dawns upon the world in this masterly story!

15—THE INVADING ASTEROID
by Manly Wade Wellman

Into the vision of the Earth swam the huge but innocent asteroid. Mars, at death grips with the Earth, was far away; but the asteroid loomed ominous, menacing. Two men were delegated to solve the mystery; and what they found is revealed in this startling story.

16—IMMORTALS OF MERCURY
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Under the sun-parched surface of Mercury, we follow in this story, the experiences of a man, reminiscent of Dante's Inferno. Every force of grotesque nature, the bitter enmity of the Immortals track him down in his wild escape to the surface.

17—THE SPECTRE BULLET
by Thomas Mack
and
THE AVENGING NOTE
by Alfred Sprissler

are two surprises for the lovers of scientific detective mysteries. Death strikes suddenly in these stories; clever scientific minds and cleverer detectives are pitted against each other in a duel with Death.

18—THE SHIP FROM NOWHERE
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A trip to infinity is this unusual story; a mad chase across the infinite emptiness, tracked always by the avenging Marauder. Here is a story that deals with millions of years and billions of billions of miles.

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VOLUME 5
No. 5

WONDER Stories

DECEMBER
1933

. . . . Prophetic Fiction is the Mother of Scientific Fact . . . .

HUGO GERNSBACK, *Editor-in-Chief*
CHARLES D. HORNIG, *Managing Editor* FRANK R. PAUL, *Art Editor*
C. P. MASON, *Associate Editor*

THE WONDERS OF MOTION—MATTER

By HUGO GERNSBACK

DURING the past few months we have seen a great deal about a so-called new development whereby it is now possible that matter can be evolved out of motion.

Press dispatches from the California Institute of Technology recently described the creation of matter out of pure motion.

In WONDER STORIES for September, 1930, I said editorially, as follows:

"It is now claimed that the ultimate subdivision of matter—the electron—is not a charge of electricity, but that this final result of matter is only a form of wave motion. Just as we have light waves, sound waves and radio (electromagnetic) waves, so scientists now point out to us that all matter in its final state is nothing but a wave-motion. In other words, the sound which you hear, the light which you see and the radio waves which your aerial picks up are all just as real as bricks, or bricks are no more real than they are. The only difference is that they are more subdivided, more tenuous. A homely analogy will perhaps serve to illustrate the point. Take an ordinary brick and grind it up into its finest possible state. If you use the right sort of machinery, you will be enabled to make such a fine powder of this brick that, if you use a blower and blow the particles up into the air, it will take days and months for the fine powder to come down. Of course, between matter in powder form and matter in wave-form there is still a tremendous difference—a greater difference than between matter in powdered form and matter in its solid state."

From this, it will be seen that the thought of creating matter out of nothing is not exactly new; and difficult though it is to accustom our minds to the thought, it probably will be found in time to come that this is the actual source of all matter.

Experimentally, the idea seems to hold water if you consider the following:

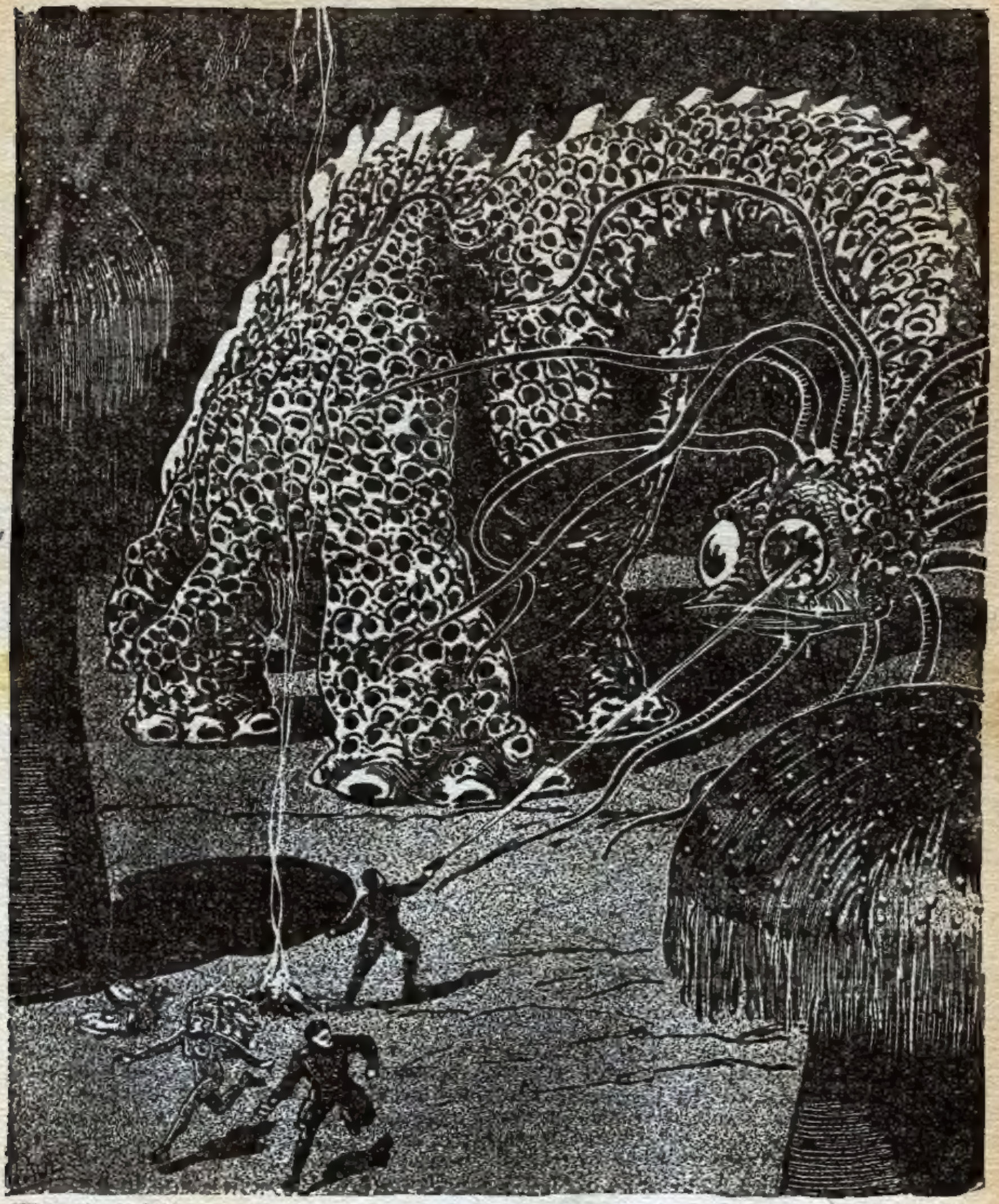
In Paris, the Joliots (daughter and son-in-law of Mme. Curie) projected alpha particles at lithium atoms. To their surprise, they found that from each collision they recovered a boron atom and a *neutron*, which, together, had more mass than the original lithium atom and alpha particle. American scientists suggest that the additional weight must have come from the energy which propelled the alpha particle into the lithium atom.

In addition to this, Dr. Carl D. Anderson projected the newly discovered "positrons", or positive electrons, into atomic cores, or *nuclei*. It was found that neither nuclei nor positrons were affected. But, apparently, from their collisions, now appeared fresh electrons; which could have been created, perhaps, from the energy which projected the positrons.

All of this seems somewhat involved and difficult to understand, particularly when you stop to figure out how it happened originally. It is the old story; which came first, the hen or the egg? Or, suppose you contemplate a universe of totally empty space, as it was before any matter had been created. There was then, here, only a great and empty void. Now comes a puzzler: where did the motion come from into this empty vacuum called space? There was no light, there was no matter; there was no activity.

But I suggested editorially, some years ago, that the original impetus may have been given because of a warping action in space itself. And, while space itself is supposed to be weightless, yet even empty space may have some physical characteristics which we do not understand as yet; because science has not evolved sufficiently to give us a correct insight into this.

Some such evolution must have taken place; because the creation of matter out of nothing must have started some time. Science will tell us more about this, in due time.



(Illustration by Paul)

My blue ray was slashing and goring into the depths of the extinguished eye.

EVOLUTION SATELLITE

By J. HARVEY HAGGARD

● We have never read a story quite like this before. Herein is propounded a new theory; one so ingenious, in fact, that it will make this tale refreshing to even the most hardened science-fiction fan.

Evolution is one of the greatest mysteries that our scientists have to face. What causes it? What are its ultimate effects? What regulates its speed? Providing that there are other inhabited planets, would evolution take the same trend upon them—would it be slower or more rapid than it is upon the earth? Mr. Haggard answers all these questions, and others in this thrilling narrative of terror and supreme horror upon a world of evolutionary monstrosities.

PART ONE

● The space-ship lurched violently; my body hurtled from its seat before the desk and staggered across the room to bring up viciously against the wall of the cabin. For a moment the four walls spun, and then I gained my feet upon a rolling, swaying floor, fighting my way to the door, out the door, up a corridor inexplicably inclined upward, and then into the control room. But by this time the ship's lurching had subsided and it was progressing steadily forward again.

The pilot stood before the curving transparent nose of the prow, his eyes on the firmament beyond and his hands nursing the control levers which studded the broad sill of the space window. Through the glassite, the ebon astral curtain, diademed with glittering stars, seemed perfectly normal. Nothing seemed amiss.

Cursing a bit, I nursed a bruise on my forehead with a handkerchief which came away blood-stained.

"What's the matter?" I cried in irritation. "For heaven's sake, Gade, haven't you learned to steady a space-ship yet?"

The man at the controls turned.

"You here, Bob?" he queried with mocking mildness.

His eyes were malevolent with mockery as he surveyed my disheveled appearance and noted the bruise on my forehead. For a moment our eyes locked.

"Listen here, Gade!" I cried in a passionate burst of temper. "We've always been friends until this accursed voyage! I thought you were my staunchest comrade. But, by God, if I thought you merely did that out of spite—"

I paused. Gade's eyes had narrowed. His erect young figure, uniformed in the grey of the *Space-Guard*, had stiffened.

"Y e a h?" he suggested meaningly. "You'd what?"

Dimly I realized that my fists were clenched; that I was poised to spring. A brief picture flashed into my brain, of Gade and myself fighting, two Captains of the Earth-Guard, pummeling ignominiously in the center of the floor. It was like a draught of cooling ice-water thrown upon my brain. I swallowed my wrath.

Forcing a smile, I advanced with outstretched hand.

"I'm sorry, Gade," I said sincerely. "This damnable voyage! Everything's gone wrong! I guess I was just irritated!"

Gade's austerity vanished; I knew it would. Good old Gade! The ventures and escapades we had been through! But this voyage had been one irksome delay after another.

"I'm sorry too, Bob," returned Gade, with a shadow of a smile. "I guess I was

just a bit rattled myself. You see, it was a small—asteroid. I hadn't time to give a warning; I just had to dodge. I—barely—missed it. I guess it sort of put my nerves on edge."

For a moment, the sheer relief we derived from having avoided such an ignominy as physical conflict buoyed up our tired spirits and we chatted with something of the old courage. But this soon died as the memory of our recent difficulties became once more manifest in our memories. An evil spell seemed again to brood over the space-ship.

It had been an ill-omened voyage from the very start. First one thing and then another had gone wrong. It had all started when the Space Commander had called us from the barracks of the *Earth-Guard* base to his private office and closed the doors. He had been pacing the room. He was gaunt and his eyes were red-rimmed lights peering from dark hollows. He commanded us to be seated and ran his hand through the sparse white hair which lay tousled over his high forehead as if he did not know how to begin.

"Here!" he cried, disregarding our amazement at his appearance and shoving the blue oblong slip of a spacegram across to us. "Here. Read that!"

And we did read it. We read it while the Space Commander bit his lips and stared into space, while his long blue-veined hand tugged restlessly at his chin. And as the meaning of the spacegram became conspicuous, our consternation grew. It was a message of despair; a message which presaged the entire incredulous adventure.

It had come from the Neptune base of the Earth-Neptune Passenger Space Line. It was brief, but it held much meaning. It merely stated that the fourth ship in the last three months had disappeared mysteriously and without a word, somewhere in the depths of space between Earth and Neptune. Somewhere in that two billion some-odd mile stretch of matterless space, those ships had vanished, and no word, either from last wireless messages or from clues of wreckage floating through space, had hinted at the manner of their passing.

"It cannot go on!" the Commander had cried, knotting his lean fist and smashing it into the desk-top. "It must be stopped! It threats at the very heart of commerce which has arisen between the two greater planets in the Solar System. We must find that seat of trouble."

● Gade and I had looked at each other with white mask-like faces. We knew already what our job would be; to find that seat of trouble.

"You know the route of the Earth-Neptune commerce," the Commander had continued. "You know that it varies with every passing day as both bodies swing around the sun at vastly different speeds and at widely separated orbits. What new dangers lie in each new trail, we know not. Every sailing may mean the encountering of some hidden menace heretofore undiscovered. There is but one fact upon which we can base our suspicions, and that I will attempt to explain.

"The ordinary Earth-Neptune route is directly through space, with no stops. But during the past few months, Uranus has swung in very near to the line of space-travel between Earth and Neptune. Many space-ships swing in close to Uranus and her four satellites for a sightseeing trip. Uranus, an uncooled liquid world incapable of supporting human life, is an attraction for all curious planetarians. Of her satellites, small moons but a scant 1,000 miles each in diameter, little is known. There is a chance that this menace may lie on or near Uranus. These ships, passing close to this planet, may have been drawn in by—who knows what?—

"That is what you are going to find out!"

That had started the ill-fated voyage. For sixty-eight days, the space-ship had plowed her way through space, encountering one difficulty after another, until our nerves were frayed and our tempers but live sparks waiting for provocation to

spring into raging flames. Nothing but space—space—space. And terrible monotony. The space-ship might have been a tiny world in itself, with just Gade and myself alive, living only to take turns at the ship's controls.

We had been laid up for three days by a great drift of meteoric particles. These particles, travelling at the speed of twenty miles per second, had darted in upon us unawares. Of course, the concussion of these tiny wanderers is not sufficient to crack the exterior of our super-hardened space-ship shells. But a body in motion, when stopped, releases all of its energy in heat, which is proportional to the velocity. The energy released in each meteor would be sufficient to raise its temperature to 140,000 degrees Centigrade if the specific heat is the same as water. The shower of meteors was like a fiery snow, their molten incandescence upon collision keeping the outlines of the degravite screens enshrouded in fire until we had to fold them into the recesses of the protecting steel armor which juts out from the exterior of our space vessel. For three days, we were forced to drift in a helpless orbit until the meteor storm was over. A brilliant display, which bathed the exterior of our ship in fire, but hardly calculated to aid the tension of frayed nerves, especially since the storm continued for 72 solid hours.

A Strange World

By the end of the first week, we had passed the limits of the communication area of the Xena-ray radio space-phones. Our troubles became more complex when a radite tube connected with the space-phones exploded accidentally and sprayed the food compartment with cosmic rays which so deteriorated the concentrated food pellets as to dissipate half their energy. This resulted in a food shortage.

The degravite screens, after their short immersion in the meteor storm, had not been folded in quickly enough to prevent damage. They failed to perform perfectly thereafter, and the time made was slow.

Sixty-eight days, and nothing but space. Two men in a tiny world which moved endlessly on. We grew surly and short-tempered, which can doubtlessly explain my bursting out with vehemence shortly after the space-ship had flung me about and bruised my body as it dodged an asteroid.

"Uranus!" I ejaculated in virulent soliloquy, staring from the control-room's transparent prow at that astral body. The planet was now assuming a position of prominence in the firmament, basking like a huge half-moon before the background of dark star-besprinkled space. "I don't like it, Gade. The real trouble must be located there."

Gade nodded silently from the control-board. The planet was but a huge ball of seething liquids, not yet cool, and the clouds of vapor which blanketed her presented a convoluted and unruly surface, Two tiny globes out in space near her were visible, satellites swinging around the mother planet. The other two in Uranus' train were doubtless around the other side of the globe.

For long moments I leaned against the control-desk, moodily studying the foreboding planet. There followed an unbroken silence. We both felt the influence which was gradually stealing upon us, a malevolent entity which seemed to give Uranus a sinister personality. A demon face from the void, it seemed to leer at us.

It was Gade Williams who broke the silence.

"To save my life, Bob Mobart," he cried irritatedly, "I can't imagine what anyone would want to see in Uranus. I hate it! Why, it's a formless unhabitable planet! What is there that attracts men to that which is dead and useless?"

I shrugged.

"What has always attracted men to the stars?" I queried in return. "But I've been thinking, Gade, thinking just the same thing you have. Why would anyone wish to make a detour between Earth and Neptune to see Uranus? Of course many people have not seen it! They would be

filled with natural curiosity. And of course, there are others—"

Gade looked up from a gauge indicator with a wry face.

"Slow," he commented. "Terribly slow speed. We'll never end this journey. But, what others?"

"The scientists!" I pondered. "Always has Uranus been a mystery to those who seek out the mysteries of the Universe. Once Neptune likewise shared this reputation, but now we have found there an intelligent race of beings, and commerce has been established between two great races. Knowledge has been communicated and Neptune holds its secrets no longer. But far back in time, centuries ago, when Uranus was first discovered, it adopted a mask of mystery which has not been cast aside. It is an unknown entity, dragging its equally enigmatic satellites through the void on its solitary orbit. Lifeless, mysterious, dangerous, it holds a shield of the unknown between itself and the living Universe."

Gade twisted his mouth in a mild sneer.

"Getting sentimental?" he jibed. Then seriously, "But I feel it too, Bob. I understand what you mean."

● There was a moment's silence.

"I've been wondering, Gade," I continued. "Wondering if the enigma of the planet lies not wholly in the mystery which surrounds Satellite One of Uranus."

Gade looked askance. "What of Satellite One?" he queried.

"When Uranus was first sighted in the Universe," I continued, "very little was known of it. A body almost two billion miles from the sun, little was to be ascertained except its mass and density. But through a spectroscope, a very mysterious fact was found . . . .

"Light, reflected from that planet into the spectroscope, showed that it had passed through a substance not known on earth. The usual Fraunhofer lines in the spectrum were brushed aside for lines which differ from any other planet lines as well as from the characteristic 'red-spot' lines on the planet Jupiter.

"At the present time, in the 21st century, since space-ships have plowed through space and science has thrust its seeking eye for knowledge throughout the Solar System, it has been learned that no new substances are to be found, even upon Uranus. This peculiar emanation which so affected the Fraunhofer spectral lines, was not caused by differing substances on Uranus, but by a ray disseminated very mysteriously from Satellite One. By Jove!"

"Why, what's the matter, Bob?"

"I've just remembered. Years ago, Satellite One was a topic of much interest. Indeed, several scientific expeditions were sent to investigate it, for the satellites had been almost wholly neglected in former expeditions. Two ended disastrously. One of them completely vanished; the other was reported to have been swept into a comet's train, its fused wreckage being found later off Jupiter. The third brought back scant, unreliable information which seemed so utterly evasive as to be of probable false origin. Then public interest wavered and fastened upon other things and Satellite One was forgotten. Gade, it's just possible."

Gade Williams seemed nonplused.

"What do you mean?" he queried.

"Just possible that this has something to do with our menace. Perhaps this scientific curiosity motivated the ships to approach Satellite One for closer scrutiny. Gade, we'll have to take a look at it—"

Gade had been looking at his watch. He had seemed but half interested. Suddenly, intense irritation crossed his face.

"Damn it, Bob!" he cried. "You've been talking for a quarter of an hour, and I've forgotten everything I'm doing. It's way over time for your shift!"

He flung the controls into my hand and stalked for the cabin, leaving me staring after him. A brief flurry of rage stirred within me, and then was gone as I became lost in revery which had to do with Uranus and her first satellite.

CHAPTER II

Satellite One

● "Well, here we are. Satellite One, the mysterious, the ineffable, the enigmatical!" sang Gade with a flourish and a bow as he removed one hand from the controls to gesture at the expanse of the densely vegetated satellite which floated below the space-ship. But despite his lack of respect for the menace, this satellite might constitute for us, his spirits had risen with the approach of the moon. The monotony of space had broken, and we were greatly refreshed by the ever-changing vista of the satellite's surface.

Most of it was covered with water. But one single continent protruded from the liquid body of the sphere; this much we had ascertained while still in space. This continent was thickly covered with tropical profusion.

For some moments, I had busied myself scanning the jungle below with a pair of binoculars. I must have started in astonishment and grasped hard at the control desk with my free arm, for Gade interrupted me in excitement.

"What's the matter, Bob?" he asked. "Here! Give a fellow a chance to look!"

I delivered over the binoculars and took the controls without a word. I was very puzzled. To tell the truth, I could not explain exactly just what had frightened me. The binoculars, after the oval of vision had swam mistily as I adjusted their foci, had suddenly cleared. I was looking into a magnified section of the dense jungle below, as if I were suspended above its reach.

It was then that I experienced that giddy sensation which so amazed me, and yet which I could not clearly analyze. For the jungle appeared to be almost alive. The long sinuous twigs were growing visibly, jutting out new buds which shot out into crystalline twigs which in turn produced leaves almost immediately. Even as I watched, a small leathern-winged bird had darted across the vision of the binoculars just above the jungle. A maze of shoots sprang upward from the branches. One snatched at the tiny creature and had immediately covered it with many tendrils. As the bird fluttered helplessly, other shoots radiated from the jungle growth, and in a moment it was lost in a dense surrounding maze of the branches which completely hid the bird-like creature from view.

Meanwhile, our space-ship was descending, and I was taking notice of certain gauges gracing the broad control-board.

"An atmosphere!" I triumphed. "There must be thirteen feet pressure per square inch at the jungle's level. And the air is not unlike our terrestrial atmosphere."

"Keeno!" cried Gade joyously, tearing his eyes from the binoculars and taking over the controls again. "I'm aching for a chance to stretch my legs again."

I laughed shortly.

"Fat chance here!" I said. "We're here to make a search for clues of those missing ships, *not* to entertain ourselves."

"You don't mean that we won't land?" he demanded.

"Not until we've explored every inch of this continent from the air," I returned. "And then not until we are sure it is absolutely safe."

Gade snorted contemptuously. He had never become reconciled to the fact that the Space Commander had given me authority over him as a Senior Captain. My will, should I be forced to resort to it, was inexorable. As a gesture probably meant to convey defiance, he let the space-ship slip to a low position out over the jungle before he halted it again. I said nothing, not wishing to cause another outbreak.

The broad top of the swiftly growing jungle was now visible to our naked eyes. There was something inexplicably sinister about the writhing profusion of swiftly growing jungle-top; almost as if a brooding mentality lurked below, watching and waiting. The entire life cycle of the trees was going on before our eyes. They were withering and dying, while others grew visibly. Flower buds grew to gigantic sizes and burst in a brilliant corolla spray, almost immediately afterward throwing

seed-spores into the wind. For some unknown reason, the life cycle upon this satellite was vastly speeded.

"Holy cats!" cried Gade in astonishment. "Watch those trees grow! Watch them! Why, those flower-buds come popping up off those twigs like popcorn. Watch them, will you?"

● Delighted as a child with a new toy, Gade was leaning over the control desk, absorbed in the amazing spectacle. I, too, stared in mingled amazement and apprehension. The flowers bursting up from the jungle were of every shape and color, but there were no two alike. Some were fresh and new. Others were wilted and drooping; but from the heads of the drooping flowers rose fuzzy wind-spores, torn loose by the wind to descend in a cloud through the twining branches of the jungle giants.

My eyes followed a seed-spore which floated from a great broad-fronded plant. Catching on the limb of a twining vine festooned to the upper branches, the amazing seed-spore took growth and extended a shoot into the air. But the shoot did not develop into a broad-fronded plant as had been the mother tree. Instead, it sent delicate tendrils drifting like lace into the wind.

I stared back at the jungle; looked quickly about. Yes, it was true. No two plants of the jungle were alike. Some were thick and heavy, others but erect cane-like shoots emitting sprays of leaves from the joints. Many vined and twined as parasites about the others. But no two plants were identically alike! Feathery foliage, broad fan-leaves, fern-like fronds and festooning drapery were all represented, but the foliage, no matter what shape, was constantly changing into some new unique formation.

Could it be?—yes, there could be no other explanation. Evolution on this strange satellite was so remarkably rapid that each budding shoot adapted itself to the moment's environment rather than taking its characteristics from the mother plant. Instead of growing, these plants evolved into formations most favorable to the surroundings which chanced to fit their moments of conception.

Even as I watched, a broad fan-leaf withered away, leaving but the skeleton leaf-work which soon assumed a spiked, knobby appearance. Beautiful artistic patterns of flowers appeared. Luring, exotic beauty! I had allowed a bit of the atmosphere from the satellite to seep into the control room through a valve. A nauseous breeze redolent with drugging fragrance permeated the control room.

I tell you, the jungle was fascinating! It beckoned. It lured. It promised.

"By George, look at that! Look at that!" cried Gade delightedly, pointing directly below the space-ship. "Beautiful! — I've never seen anything like it!"

I followed his pointing finger. Directly below the space-ship, a huge plant-bole was jutting upward in quick instantaneous growth. Lacy branches radiated from the center. From these branches drooped parallel threads of silken festoonery which glistened in the glow of the distant sun. A fairy tree for elfin people! The wind caught its dainty frillery, and a breeze carried it upward. They waved at us like reaching fingers. In the center of the plant, a liana-like growth was coiling itself into a spiral.

Even yet, I could not assure myself that all was right. There is always something about the unknown which frightens one. Beauty is always treacherous. The beauty of this jungle seemed more like the beauty of a cobra drawing itself up to strike, or a spotted leopard crouched to spring.

Strangely fearful, my eyes darted nervously about the jungle and caught a ripple of movement. A gorgeous butterfly, six feet from the tip of one wing to the tip of the other and blotched with pure red and yellow and purple, fluttered above the jungle.

And below him, the jungle sent ripples as if he were dragging an anchor.

My God—what a thought! It was luring him, trying to trap him. My attention focused, I strained in sudden horror. Yes, Those damnable twigs and branches grew

into beautiful provocating patterns as the butterfly passed over: luring, trapping.

I would have screamed, but I could not. The breath drew up in my breast and I choked at an abrupt thought, straining my hand to my throat as my eyes turned from the butterfly to the beautiful forest giant growing out of the jungle from below.

Trapping, luring!

It was horrible. When I try to describe all those emotions which tore within me in those few instants, I find that I cannot. Paralyzed by the Gargantuan portent of the knowledge which had come to me suddenly, I could do no more than turn my fascinated gaze to the Herculean plant directly below.

That instant seemed like hours. Matter seemed to have frozen. Time ceased and the Universe held its breath. That scene is registered as a long frozen picture on my memory, just as the memory of a photoplay which breaks suddenly with a single picture remaining frozen on the screen.

That gigantic pattern, that great coiled liana within the center of those radiating fronds! Gade clutching at the control desk at my side, his eyes open wide in fascination, staring downward, lips drooling, and myself—

I could see my fists clutching at the edge of the control board, white and knotted. I could sense the paralysis of fear which contorted my mouth and drew the lips back over dry teeth.

All that in a moment, and then the spell was broken. The great coiled liana leaped upward like a bolt from the blue.

"Gade!" I shouted. "Great Heavens, Gade! Ascend the ship! The ship!"

Trapped by a Plant

● But Gade, fascinated by the great plant below, had let the control levers slip from palsied hands. I leaped for them—but too late.

The great liana of coiled growth lurking within the center of the tree-pattern below had flung upward. In a trice, it had wrapped its length many times around the ship and was tugging downward. The ship lurched and swayed drunkenly. I lunged for the controls as it was dragged downward.

A wild moment. Then the controls were in my hands. I swung my weight upon them—hard. It was useless. They were stuck. The outer degravite shutters had been swung downward on their pivots so that a minimum of degravitational effect was manifest upon the space-ship's surface, just enough repulsive force being maintained to keep us floating in midair. If we were to rise again into space, the shutters must be swung so that their plane surfaces would present a greater area toward the gravitational center of the astral body below. But now the great liana had coiled tightly about the outer shutters, and it was impossible to operate them from within.

"Bob!" The cry from Gade was full of horror. He was tearing at my arm. "Bob! What's the matter?"

I turned to him.

"They're stuck!" I cried. "Here. Help me! Grab hold of the controls!"

Together, as the ship descended ever downward, Gade and I tugged and wrenched at the lever arms.

"Damn!"

It was an ejaculation from Gade. The lever, weakening under the combined burden of our bodies, had snapped off, and Gade had been taken off balance. Swinging his arms giddily in an effort to regain his equilibrium, he staggered down the inclining floor to bring up against the wall.

White-faced and wan with the realization of our fate, we stared in silence at each other. Trapped! Trapped on an alien satellite! A dream it seemed; but no—it was reality that was only too grim.

The liana had now drawn the space-ship down into the heart of the spreading foliage of the jungle giant. The great branches reached up and wrapped themselves about the vessel, darkening the transparent space prow with hungry feelers which played about the glassite surface as if searching for an aperture by

which to enter. Then, after a moment's swaying, the space-ship became quite steady.

When nothing further had happened for several moments, Gade turned from his crouching survey of the foliage to speak to me. He ran his hands nervously through his tousled hair.

"You don't think that it can get in at us, do you, Bob? Through those metal walls?"

"It's incredible to think that it could!" I returned. "But I'd be willing to believe almost anything after that demonstration. Our immediate problem seems to be just how we'll manage to get disentangled from this vegetable monster."

Sudden hope filled Gade's eyes.

"How about the ray-guns, Bob?" he queried.

"I've just been thinking of them. Gade, we'll try it! We'll open the space-door and blast the damnable thing from about the surface of the ship."

From a compartment in the space-ship, we armed ourselves with ray-guns. I crouched before the great disc-like space-door and gave Gade the word to manipulate the controls which opened it. As the door swung inward on its great hinge, the heavy fragrance of the jungle poured into the control-room. Completely filling the aperture which the space-door had just vacated, was a wall of vegetation. Almost immediately, shoots of green twigs reached inward and grew swiftly toward me. Ray-gun steadied by my side, I loosed the trigger.

In an instant, a blue cylindrical beam of light had emitted from its barrel and vanished through a hole which appeared as if by magic without, revealing a momentary bird's-eye view of the expanse of jungle-top which stretched immediately from below to the near horizon.

For a moment, it seemed that I had won. I advanced a step forward. Then the vegetation which had vanished from the doorway began quickly to grow into the aperture again. This time the growth was slow and ponderous. But the twigs seemed altered now; they were stubby and rough, seemingly encased in a strange horny armor. A cry of anguish escaped me as my blue beam swept across the cavity.

These new growths did not disappear, nor did their growth halt. Then I understood. The strange evolutive power of these plants had begun to adapt them to the environment of the blue ray.

Back and across the closing space of growing twigs I swept the ray. It was to no avail. I turned to Gade.

Gade, his face fearful, saw what had happened. Throwing down the lever which occupied a slit in the sill, he sprang backward as the disc-door flung itself hastily shut again.

Once more we were alone in the control room with the menace outside. But we were completely hemmed in. It was with the complete realization of our helplessness that we turned and stared with incredulous horror at the green wall of matted twigs which darkened the transparent prow. We were as completely at bay as if we had been set down upon a dead sea of the terrestrial moon with only space-suits and a scant food supply to delay a fate which was certain. Death?

CHAPTER III

The Girl of the Satellite

● "Two weeks! God, I'm going nuts!"

Gade Williams paced the narrow confines of the control-room. He flung the short stained stub of a cigarette he was smoking upon the floor where a litter of such stubs lay. Moaning and shaking his hanging head, he pressed his palms into his throbbing temples.

The insufferable waiting was getting into his blood. For two weeks, the great beryllium ovoid of the space-ship had been held fast in the merciless clutches of the giant jungle plant. Our space radio, reaching but a pitifully short distance into the ether of space, had kept up a continual S. O. S. In it lay our only hope. A space-ship plying the void between Earth and Neptune would be close enough to pick up the message. If it did not, we

would either starve within the imprisonment of the space-ship, or force our way out upon the satellite in a fight for existence among unknown dangers.

Weeks of waiting. They had passed slowly. The satellite revolved about Uranus once every two and a half days, keeping the same face ever turned toward the mother planet. Thus the satellite itself rotated but once during the revolution. For thirty hours, sunlight seeped through the curtain of vegetation beyond the transparent prow. Then for thirty hours there would be darkness ineffable. Eating and sleeping at irregular intervals, we had found time monotonous.

It had affected both of us, but in different ways.

I became quiet and surly, preoccupied with foreboding thoughts of the future. But the planet madness had gotten Gade. I'd seen it happen before, men losing their nerve in space. It's bad. When a man's inner possession vanishes out in space or upon an alien planet, Hell itself will look alluring.

During all of his waking hours, Gade paced the floor, brushing his hair incessantly through with his fingers and cursing our fate. His metal-mesh Space-Guard uniform, once silvery and dapper and immaculate, was now grey and dishevelled; soiled and sweat-stained. He was coatless and hatless, his hair matted and tousled. He had ripped the collar of his shirt open so viciously that the buttons had snapped from their threads.

"Go slow, Gade," I had warned him time and again. "Go slow. I know how you feel. You've got to bear up. Don't let it get you."

Planet-madness, we of the *Space-Guard* call it. I'd seen far better men than Gade suffer from it. But my advice, instead of calming him, had infuriated him.

"Slow!" he cried, spinning wildly to face me. Gade was slim and erect. His facial features were smooth and determined in a "hard" baby-faced way. Only his small full lips revealed his weakness. They twitched at the corners continually now as he spoke. "Slow! Why should I, when we're penned here like rats! Penned by that damnable plant! Facing slow starvation." Then he would break down and weep. Convulsive sobs would rack his body. "Oh, God, Bob, let's get out," he begged. "Let's break out of this coop somehow. Anyway, someway, Bob! I've got to get out." Then I would go to him and try to comfort him.

And for two weeks it continued. Gade was getting wan and emaciated. In his occasional sobbing fits, his eyes were becoming strangely tearless. They began to glow greenishly in the reflection of the electric bulb's illumination during the long Uranus night. I recognized the symptoms. Soon he would be stark and raving. Something had to be done immediately. I came to my decision on the fifteenth day after our ship had been drawn into helpless captivity. Our food supplies, already short, were now nearly exhausted. We could hardly depend upon the chance of a rescue from space.

"Gade," I said. "Let's get out."

In a moment he was tearing madly at me.

"Bob," he half-laughed, half-wept. "Bob. Oh, for the love of Heaven, yes! But how?"

"There is a possible way," I returned. "We can cut a section out of the ship's hull with ray torches. Then, destroying the portion of the plant which will be exposed through the opening, we can dash through before it can adapt itself to the ray and grow back. In this way, we may be able to escape."

"Escape!" he exclaimed incredulously. "Escape! Fall to the jungle below you mean. Fall to be caught by those greedy reaching branches."

"No, Gade. We have our degravite space-floaters."

His eyes widened with comprehension.

"Of course!" he ejaculated, hope dawning in his eyes.

● The space-floaters were really degravite apparati designed to regulate the weight of a man upon any astral body so that it would correspond to his relative weight

on earth. A circular metal belt fitted about the middle of the wearer, held in place by a harness strapped about the torso. An array of tiny degravite shutters were mounted on the outside of the belt. These shutters could be opened or closed at will by the control of a small lever, thus varying the repulsive force of the world below upon the body, or multiplying it until the weight of the wearer was normal to his native planetary habitat. If desired, the repulsion force of the floater could be so manipulated that the wearer could lower or elevate himself in mid-air.

On the fronts of these belts rose a transparent glassite shield, curving up before the body of the wearer and cupping back in a protecting helmet over the head, forming an ideal protection in chance frays with savage men or beasts of alien planets. At each side of the glistening transparent shield were movable sockets which held ray-guns, ready at hand to train upon the enemy.

Consummating my proposed plan, we prepared a huge hand ray-torch. Concentrating its beam to a tiny destructive pencil of caustic force, I held it close to the wall which formed the hull of the ship. There was a sigh of rushing air as it bit through the inner hull to the vacuum. Then it had bitten through both inner and outer hulls, leaving a molten slit in its trail. Tracing a huge irregular circle, we were gratified to see a large section of the hull fall inward.

We had already donned our floaters in preparation. Now, as the tendrils of vegetation grew swiftly from the plant wall in the aperture, we trained our ray-guns simultaneously.

A vacant hole appeared. We both leapt through, pulling the repulsion lever far over on the belts strapped about our waists.

The world spun as I fell through space. An ocean-like expanse of jungle whirled dizzily about a vortex formed by my body. Then the heavy tugging sensation of ascension began as my body swung swiftly upward.

I was floating above Satellite One, peering out through the transparent shield cupping before my face. My eyes blinked from the glow of a far distant sun which hung in the eastern sky. Far below stretched the jungle, while directly beneath my body floated Gade. I could see his features clearly. He looked downward at the receding satellite and gestured around his glassite shield.

Below, the gigantic bole with its burden of the space-ship stuck out from the jungle, a giant hat-pin. An amorphous fist of clutching vegetative fingers, it motivated a shudder of aversion which I could not suppress. Already, the aperture through which we had leapt was clogged and hidden by hungry branches.

But here was freedom. Gade felt it, too. His young impetuous face already had brightened beneath its paleness. With flaring nostrils, he breathed heavily of the thick air so laden with fragrance from the jungle below.

"Great stuff!" he shouted joyously, jiggling around in his floater by kicking his feet. "That air; I'm beginning to love it!"

"Yes, it's great," I agreed wholeheartedly, drawing the intoxicating atmosphere into my lungs. For a moment, my attention was curiously attracted to his flaring nostrils. His face, after the days of imprisonment, seemed changed. Heavy bags were beginning to drop below his eyes. His nostrils were flaring. But then, so were mine. It must have had something to do with the sweet-laden fragrance which saturated the atmosphere, I reflected, some peculiar reaction of our terrestrial muscles.

By tilting the repulsive force so that it centered upon the portion of the satellite below and directly to the rear, we could propel ourselves forward at will. Presently, we were floating along the course of a river which wound through the jungle in a muddy saffron ribbon. Although our only proof that a portion of this planet was adapted to animal life lay in the brief glimpse I had caught of the leather-winged bird and the huge butterfly, we were perfectly satisfied that the

jungle did not cover the entire continent whose outlines we had seen from space.

The imprisoned space-ship had almost immediately disappeared behind the rear horizon. Several hours had passed. Then Gade gave an exultant cry. He pointed to a blotchy expanse ahead where the jungle receded from the river's banks, leaving a clearing here and there. The edges of the river's banks through the clearings appeared to be studded with great mushroom-like growths.

Gade let out another "whoop!" into the air as we propelled ourselves quickly forward. It was his wild cry of exultation, undoubtedly, which had attracted the thing. I had no time to give warning. The hurtling mass of talons on leathern wings materialized from the sky overhead and swooped down upon him, claws outstretched.

Even yet I can give no detailed description of the great aerial monster. Its momentary impression was massy and vague in my vision: a vast globular body between tiers of small flapping side wings: a band of huge triangular eyes around its middle, concentrated on its prey: talons reaching from every angle of the massy wings: a great mouth gaping darkly in the under center of the sagging body.

With the quickness of instinct, my hand moved, darted the ray-gun about upon its swivel at the side of the glassite shield. It cut across the monster's body, that blue sword-finger of light, and the first intimation of its presence came to Gade as a leviathan bellow issued from the distended mouth cavity, and the fragments of the great body, cut through by the ray, hurtled down to submerge into the river's currents far below.

Two Men and a Girl

● Gade had turned in an instant at the sound. His startled eyes followed the ghastly remnants till they had become hidden in a splash of the sullen stream below. He said nothing, but I read his quick, impulsive gratitude. However, it did not sooth my sudden fury at his carelessness.

"Can the noise!" I cried. "We've got to have caution! We don't know what's going to turn up here."

Silence prevailed. As we floated slowly down to hover over the clearings, a misty cloud of tiny particles was being borne upward on the wings of the wind. Light as down, these particles fluttered around the glassite shield of the floater and beat into my face. They even clung to the short hair on the back of my hand. Squinting, I managed to examine them carefully. They were tiny seed-spores, I decided: minute spheres of glistening hardness clinging to gossamer umbrellas of tiny fuzz which the wind caught and whipped along with the slightest flurry.

We propelled ourselves quickly out of the spore stream, and came to a halt to the windward.

"Mushrooms!" exclaimed Gade. "See those enormous mushrooms. The spores are sifting from their crowns."

It was true. The great growths, five feet in height, of a greyish substance, had burst open in the crown, and a stream of the tiny spores was leaking upward from each one to mingle in the greater cloud which the wind was bearing into the distance.

Adjusting my binoculars, which were slung in a case from my shoulder, I examined the growths in nearer perspective. They were of an unhealthy fleshy appearance.

"Shall we land?" queried Gade.

I demurred.

"No, let's not. I think the sea must be near by the action of the river. See how sluggish it is! The clearings will probably become more frequent nearer the ocean where we can land with greater safety."

It was some time later that I paused in mid-air and looked about. We were now drifting over scattered clumps of vegetation which grew from a rocky, rugged soil. The sea, purplish and murky in the distance, leveled the horizon before us.

"What was that?" I rasped, holding up a warning hand and listening attentively

Yes, there it came again; a faint far-away cry against the wind.

"Pete's sake!" gasped Gade, clutching instinctively at the butt of his ray-gun. "It sounded like the cry of a woman."

"It was the cry of a woman—for help!" I cried. "Come on."

Darting swiftly across the sky of the satellite in the direction of the source of the cry, we grasped our ray-guns and peered searchingly into the broken forest below.

Then again came the cry, nearer and louder this time, floating out with the clarion tone of a bell. An indistinguishable cry, but unmistakably a supplication for help.

"Here, Gade!" I had glimpsed a flutter of motion through a sparse clump of vegetation. "This way."

In a moment, we were hovering over a scene which I shall never forget. Always, afterward, I remembered it as the first time that I beheld Nadia.

● There was a small clearing. She was in its center, a slim lissome creature, struggling in the grasp of two naked beast-like men who were trying to drag her toward a forest trail leading down toward the ocean.

Then we came hurtling down; had stumbled upon the sand beside the struggling trio. Gade fumbled with his ray-gun.

"No, no, Gade. The girl!"

Gade nodded, his eyes angry as they fixed upon the cowardly beasts who had attacked the girl.

At my cry, the beasts turned and the girl stopped struggling. The ill-assorted trio stared with mingled emotions at our coming, weighing the import of our presence upon the situation.

The men-beasts were horribly repulsive; monstrous caricatures of hate and grotesque horror. Strangely enough, their physiques were dissimilar. One was globular; crouched on three knobby many-hinged legs. His round head gaped into a drooling mouth. Antennæ spiked sidewise from his head. A row of tiny eyes crowned his forehead, glinting angrily at our intrusion. The other beast was spindly, but man-like. Under the hairy skin covering his body, protruded corded sinews. Instead of eyes, two phosphorescent balls suspended on curving antennæ projected from the face; a bulbous coarse nose, thick protruding lips, a receding chin and sloping forehead. The beasts crouched, knuckles pressed ape-like to the ground in preparation to spring.

And the girl. Never shall I forget her. Her slim curving body seemed molded from cool green marble. Covering her torso tightly was a garment of silvery overlapping scales. That picture will always remain with me as I saw her there: slim limbs, poised for flight; shapely hands reaching up toward half-parted lips.

Even in that scant moment's swift survey, my breath bated. There was something in the depths of her beautiful green-pooled eyes, staring up from wells of deep lashes; something in the curve of her small half-parted lips that lured! An ethereal face was framed in a halo of pure white hair which rippled and cascaded down around her shoulders to her waist. Beauty that was exquisite! My inner being seemed drawn toward her in a world of longing. She seemed to beckon. All that call of primeval man to his mate surged in invisible magnetic lines between us, magnified ten-fold, while she stared from Gade to me as we faced them in the clearing.

And then—the two beasts charged!

Crouched behind the glassite shields, we waited, hands tensed on ray-guns, watching for an opportune moment when we could strike without injuring the girl.

One of the beasts stooped midway in his charge. Then he was up again, tensed back. A stone, huge as his head, hurtled from his flinging many-jointed arm.

I aimed an abortive burst of the ray at the missile in midair, and missed. Crash! It had bounced back from the glassite shield before my face; had bounded to the ground. The weight of the impact carried me back, staggering, and the cave-beast leaped upon me with a charging snarl.

Ignorant beast-savage of another planet!

I feel sympathetic with him, now that I have escaped. Pitting savagery against the weapons of man's science. But he almost won—at that!

Grasping the edge of the shield whose invisibility he could not understand, he wrenched it around and hands tore into my body. Exposing his teeth in a vicious snarl, he snapped for my throat.

I raised an arm, pummeled a fist into the great nose, just in time to stop him. Meanwhile, my other hand had removed the ray-gun from the swivel, was sliding its blunt nose into the space between my breast and the shield. His hot caustic breath gusted rancid into my face and nostrils as he pressed closer. Then—

The ray-gun spat its piercing needle of blue light. A jagged hole appeared instantaneously in his breast. Infinitely surprised, the savage leer faded from the bestial face, and his limbs slumped in a death agony, bearing him lifeless to the ground at my feet. One gone.

I spun. But Gade had finished his antagonist. Only a bloody remnant remained, lying on the ground. Gade stood, hand still on the ray-gun. He was transfixed; eyes hungrily devouring the figure of the girl standing hesitantly before him.

An inexplicable wave of jealousy surged over me. I took a step forward. He turned. Our eyes locked.

Two men chained in passion primeval, we stared with a flash of incomprehensible and instinctive hate. Two men, alone on a planet. A woman. Had the conditions which followed been different, we would have become enemies forever. Not from that moment on, for the moment was unnatural. But hate would have gradually grown up again to a flaming tempest.

Abnormal situation!

Perhaps it was. Perhaps even then we realized instinctively its madness and abnormality. But it was none the less real. The madness of adventure; the madness —of Satellite One. Planet-madness. It had already crept into Gade, and now I could feel its influence upon myself. Insidious. Possessing. Even then I sensed rather than comprehended that something was happening. Something was changing. Something was beginning to creep into my inner being of which this moment's madness was but a reaction. Disquieting. Warning.

A sixth sense?

Perhaps.

CHAPTER IV

The Evolution Monstrosity

● A tense moment; then it was over. The jealousy and hate vanished after that single instant and then seemed far away. A wave of mild astonishment crept into my consciousness over the emotions which had just assailed me. It left me vaguely disquieted.

I let my hand drop from the ray-gun, and turned my eyes back to the girl. She seemed to have no fear of us and was watching attentively through long-lashed eyes of green. My attention was again attracted to the covering of glistening scales which fitted to her torso. A garment? No, it was a part of her, just as much as her hair was a part of her.

Gade advanced cautiously, lest he frighten her.

"No speeka da Eenglish?" he queried, much to her wonderment.

"Don't be silly!" I admonished. "She wouldn't understand our language, or any terrestrial tongue for that matter! Try the sign language."

Members of the *Space-Guard*, who are often called upon to communicate with intelligent beings on other planets of whose language they are ignorant, are naturally more or less proficient in the sign language. Signs signifying objects of nature and the universe are universal and easily conveyed by simple gestures of the hands and body. But despite our efforts, we could not make the girl understand a thing.

She merely stood watching us wonderingly.

"I guess she 'no savvies' in its worst degree!" said Gade.

"You said it!" I returned. "Wonder who her people are, and where they are."

"A few more 'wonders' and our cate-

gory of questions will be complete," said Gade. At this point, the girl seemed suddenly to have gained speech. A series of grunts and hoarse snarls issued from her beautiful lips. Gade and I gazed at each other in incredulity. For the moment, it had sounded like the chatter of a lower animal.

"Must be a language of some sort!" I remarked, though I doubted it myself. Was the girl a simple creature of the jungle, as simple as the butterfly or the leopard? She surely seemed a wild creature, poised there. Wild; and beautiful as barbarity can sometimes be.

Just then a savage medley of snarling issued from a nearby thicket. The girl started in alarm, and then moved quickly behind us, from which position she peered apprehensively toward the source of the noise. A small octopod had entangled itself in one of the plants and was struggling to free itself. The branches which grew into a matted gnarl about its body quickly stiffled its cries. The girl, after assuring herself that all was well, came again in front of us with a little chuckle which might have been in amusement at the lack of menace from that which had frightened her.

"Seems to have adopted us," I remarked.

"Well, what are we going to do?" asked Gade. "We can't leave her here."

What he said was true. If her people had been near, then they would have heard her cries and have come to her rescue. It was obvious that she was afraid of the jungle and needed our protection. On the other hand, we couldn't possibly take her up in the floaters with us.

We finally decided to pursue our course upon the ground. The girl kept close to us as we followed the tortuous windings of what was obviously a trail to the beach. Clearing adjoined upon clearing. Presently we were looking over a large expanse of the shore. It stretched along the surly ocean as far as the eye could reach. Here and there it was dotted with the giant mushrooms which we had previously noted.

It was our intention to search at once for the girl's people, with whom we could leave her with an assurance of her future safety. Again using the sign language, we tried to ask her the whereabouts of her people. She was absolutely unresponsive.

All we could do was to follow the shore and keep our eyes peeled for signs of habitants. As we went further and further along the beach, we became aware that animal life was abundant. Numerous fish abounded in the waters. Many crab-like animals crawled upon the sands. We were at first startled when several good-sized fish, which had been sunning themselves upon protruding rocks, reared themselves upon tiny legs and scuttled down into the briny deep.

"By golly!" cried Gade. "One look at them, and it isn't hard to believe that life originated in the waters."

● Winding our way between the great scabrous mushrooms whose streams of spores were blowing out into the water's depths, we came into contact with many other specimens of this strange satellite.

Later, we came to a conclusion that was startling to our terrestrial conception. The strange walking fish appeared to be but at the primary stage of an amazing metamorphosis, as was evinced by numerous others which we saw scuttling about the beach. The tails and fins eventually dropped off of the peculiar animal, leaving a gnarled, knotty toad-like creature. As growth continued, the hinder legs developed much faster than the front ones, and this new creature hopped or scuttled over and around the rocks upon the two hind legs. So grotesque and strangely like a troll or dwarf did these creatures appear, that we immediately came to know them as "moon-trolls." The size limit of the moon-trolls varied greatly. I found myself wondering if the bestial men-like creatures who had attacked Nadia were not at one time moon-trolls.

It was Gade who found the footprints. We were walking upon a sandy stretch

of the shore, our weights regulated by the floaters we wore to be exactly the same as we would have weighed upon earth. This allowed also for the weight of the floater itself, so we felt no burden as we paced along. Indeed, we were beginning to feel very comfortable and at ease. In the safety of the miniature walking fortress which the floater really constituted, I felt much more at ease than could be expected.

Gade abruptly halted motionless, his eyes fixed in astonishment upon the sand. Then he pointed excitedly.

"Footprints!" he cried.

Nadia, who had been walking at our side, suddenly noticed the footprints also. An expression of mingled anger and fear crossed her face. Pointing to the tracks, she gave utterance to excited protests which clearly registered indignation.

Extending down the beach in a series of footprints, each one being distanced about the same length or stride as our own, led the trail. Our apprehension increased when we perceived that the footprint was nearly human, although the distance between the toe-marks, of which there were four, was widespread and padded down as if by webs connecting the toes. Gade finally finished his scrutiny and rose.

"Well, that's that," he announced. "We haven't far to look now, I wager. Look at Nadia's feet!"

I followed his outstretched finger. My eyes widened. Nadia's bare feet had but four toes each, and each toe was connected by a filmy web.

"You're right," I agreed. "It must be one of her people."

Strange to say, when we started to follow the footprints, Nadia hung back and uttered short objecting chatters. It was plain that she entertained an instinctive fearful knowledge of the possessor of the feet which had made those tracks. Finding, however, that we would not give up our pursuit, she hung fearfully upon our heels, darting frightened little glances upon all sides and jumping at the slightest noise.

The footprints continued on down the beach, winding in and out of the occasional giant mushrooms, sometimes indistinct, other times obliterated by waves. But on the whole, they were rather easy to follow.

For what must have been five miles, we pursued the unknown creator of those tracks. The sun had sunk low in the skies. Back from the shore, the jungle loomed dark and ominous as night shadows crept in. Our thoughts of the pursuit were beginning to give way to troubled apprehensions of the coming night, when suddenly, the footprints came to an end.

The beach had gradually become more rocky and the tracks more faint. A steep hill rose to the inland, its lower slope jutting into the ocean, and its upper slope mottled with clumps of vegetation which merged into the dense jungle. The footprints wended from clearing to clearing, ever keeping as far as possible from the vegetation which grew about in great clumps. Finally, by travelling a circuitous route, they had emerged into a large clearing high on top of the hill. There the footprints, advancing across the clearing, disappeared straight into the jungle.

Gade drew back as a lashing sprig of the jungle reached out at him. His astonishment was obvious in his blank face. I was not one whit less puzzled.

A Death Battle

● Our search had cessated, but it had not satisfied our curiosity. It was possible, of course, that the man or man-thing which we were following had been caught in the tentacles of the jungle; that his body lay in the clutches of the dense vegetation before us. On the other hand, the regularity of the steps which advanced into the jungle wall denied the strength of such a supposition. No man, struggling against the clutches of a dragging tentacle, would leave such traces of a steady advancement.

Our quest, so abruptly and mysteriously ended, had to be given up with the approach of night. Jungle darkness had now descended over the satellite. Down be-

low the clearing, on the crown of the knoll, lay a steep incline of a roughly vegetated hillside, while below it, the sea lay immersed in a vague pool of black shadows. Fearful of being unable to retrace our tortuous path down the hillside, we decided to spend the night upon the knoll. Accordingly, we fed ourselves from the rations of concentrated food pellets we had brought with us from the space-ship, and prepared for the night.

We had matches within small watertight compartments fastened to our floaters. As darkness descended like a black shroud, our tiny campfire spit its tongue of flame from the crest of the hill. Its pitifully small illumination seemed lost in an infinity of darkness, with only our figures outlined in the glow.

Gade and I, squatted by the fire, had discarded our floaters. Nadia curled up between us, and almost immediately fell into slumber. It must have presented a strange picture.

We both must have felt it then, that sinister influence which pervaded the satellite. Something crouching and sinister. Something closing down upon us, inevitably, inexorably. I can remember it yet only with a thrill of fear. Gade's face; hanging there in the flickering gloom. His eyes, glittering and staring. Gade; but was it Gade?

Something, perhaps the indistinct light, had changed his features. His head, projecting as from a curtain of gloom, seemed bulging, unnatural. It was the flaring nostrils, the bagging cheeks, that combined to alter his facial expression. I realized that such symptoms were to be expected from a terrestrial inuring himself to the altered conditions of another planet. Yet, in the back of my brain, were arbored strange presentments.

Then my thoughts were tumbled aside. Somewhere in the dark depths of the satellite rumbled a deep bellow. Gade shot out an arm and gripped my wrist in a steel clutch.

"My God, Bob!" he cried, horror in his eyes. "What was that?"

We listened for long, but the silence which lay over the brooding moon was not again broken. Deciding that one of us must keep watch while the other slept, we agreed that Gade would have the first watch. In the thirty-hour night which was to come, there would be many watches.

I finally managed to fall asleep. My last waking memory was of Gade, crouched and tensed, staring out into the impenetrable darkness.

How long later it was that I woke, I have no means of knowing. A giant quarter-moon of silver hung in the dark firmament above like a cleaving scimitar. It was Uranus. The illumination from the planet's solar reflection was casting a cold sheet of visibility upon the satellite. Our fire had died. As Gade lay down to sleep, I replenished it.

Slumber is ever slow to creep from my veins. Consequently, I found myself drowsy, even after the campfire burned rosily into the night. The dead wood I had gathered burned like tinder. The ocean, down past the dark steep slant of the hillside, gleamed like molten silver in the moonlight. Then I dozed.

It could not have been a sixth sense which warned me. I am too hard to waken quickly. It must have been the crashing of the gigantic beast in the jungle behind me, or perhaps it bellowed again. Whatever it was, something had wakened my mentality to a fearful alertness.

Dream-like? Yes, it seemed the figment of a pipe-dream. Campfire but a smoking mass in which glittered a few coals. Gade and Nadia lying, dark sleeping shadows. And the black wall of the jungle; I remember it now, how I suddenly waked into the consciousness of a horrible fear, and how I stared all about in search of a menace which I knew had awakened me, and yet of whose character I had no knowledge.

The ocean below was still molten in the glow of the silvery quarter-moon. The black jungle swept in an indigo curtain along the edge of the ocean to the limits of obscurity. Then the star-studded firmament swam in my vision as I turned my head at last—to stare behind.

It is a sight branded forever in my memory by its sheer horror. Other objects of fear have I witnessed; objects which my brain could analyze and weigh against my prowess. But this inconceivable monstrosity seemed truly incomparable to the puny powers of mankind. It is always the unknown which holds the most terror.

The jungle wall was quavering before a gigantic inner body. And over its black height stretched a long neck, bearing a gigantic head within whose center two enormous globular eyes glared balefully at me!

In that instant when I hung breathless, as if suddenly suspended by a thread into a vacuum, my mind drank in the scene with all its horror. The jungle wall heaved suddenly in turmoil. A long neck and head plowed through it; and the gigantic body pushed its way through the writhing branches just as an ocean liner plows its way through the deep lashing waters.

For a moment, I could not scream; could not move. I knew utter paralysis. And in that moment it was preordained that I was to witness a gigantic struggle between two of the greatest forces upon an alien planet, the forces of animal and plant life.

Even as I watched, too horror-stricken to move, the battle was going on. From the jungle top lashed branches and twigs, writhing up at the colossal hulk of the monster, foliage growing to entrap, to ensnare. Then it was, watching the top of the vegetation lash up in a furious growing wave, that I became aware of the prodigious creature which the huge beast really was. For in the hulk of the great body looming dimly above the jungle, were a thousand gaping mouths. Mouths, gaping and distended, speckled the great body. Mouths which ate the growing sprigs and branches of the vegetative wall as fast as it grew upward.

A gigantic jungle plant, adapted by nature to snare and lure its prey! A gigantic animal creature, adapted by nature and evolution to withstand the ravages of the plant life of the dread satellite!

And ever the leviathan body pushed onward, splitting aside the jungle wall, while the huge head swung down and above me, the great eye-spheres embedded in the knotty head glowing with inner lights. A moment's silhouette against the moon: great knobby head; projecting globular eyes; while in a ruff about the neck was extended a mass of twisting tentacles!

Tentacles! — twisting, reaching forth eagerly toward the paralyzed human being standing before the path of the monster.

I must have screamed! I must have leaped to my feet. The memory only comes to me now in mere disconnected pictures. Somehow, Gade and Nadia were up and on their feet, staring horror-stricken. Somehow, the ray-gun was in my hand, was sending a blue beam of light in a sword which pierced into the sky. A beam flashed across—that concentrated upon one of the huge spherical eyes, an eye which immediately disappeared.

Then I was running across the clearing, trying to draw the beast from Gade and Nadia. Realization of the immensity, the force of the beast, implanted upon my brain but one thought! The creature was irresistible. It was inevitable that it would destroy one of us. If that one was myself, then perhaps the moment's diversion might allow Gade and Nadia to escape.

Then the next flash-picture of my memory: the gigantic head hovering directly overhead. The vast body loomed behind, supported by six mastodon legs. Mouths were everywhere, over every conceivable surface upon the monster's body.

My blue ray was slashing and goring into the depths of the extinguished eye. Above and around the head, the great writhing ruff of living tentacles whipped downward furiously toward me.

Another moment. The ray-gun's beam slashed across. The other eye disappeared.

Then something struck me, jerked me from the substantial universe, swung me into the vortex of an orbit of revolving

(Continued on page 447)

(Illustration by Winter)

The man at the switch kept reversing the current.

THE INQUISITION OF 6061

By ARTHUR FREDERICK JONES

● The modern average citizen of America lives a fast life. He rushes to work in the morning—nose to the desk all day, and after a lively evening of entertainment, he is dead tired. Larger and larger grow the congregation of those that "have no time for religion."

How far will this situation develop? Will the day come when the Creator is no longer worshipped—when He will become but a forgotten god of mythology?

Our author believes that we are slowly advancing to such a condition. Here is a clever little story of the future—of the day when Electricity, the All-Powerful, is the deity. And the Lord shows his wrath.

● There was a fluttering sound overhead. The few people who happened to be walking along the street at that moment stopped to look up. Between the canyon of walls could be seen a square, black something. Two people just got out of the way in time, as the thing crashed to the pavement. It had been a large book. The gilt title shone out on its leather cover in the glare of the artificial daylight that had been used to light the streets ever since buildings had gotten so tall as to make it necessary. The book was "The History of the World Since 1900". The small crowd that had now gathered about it wondered why such a fine book had been purposely hurled into space from some floor above.

On the seventy-fifth floor of the building they would have found their answer. J lived there. J was supposed to have been some derivation of the name Joseph. An hour before, he had sat down to finish reading the book. As his eyes went along the lines, he seemed ready to cry out something. It was his disgust at the way the world had prospered. Prospered? That would have been fine had it stopped when it was perfect. Now it had gone to extremes.

He was near the end of the chapter about "The War of 6060." That had just been one year ago. He stopped to think back over the pages he had read. This was the eighth war since the beginning. The first one to be accounted for was some war called the World War. It left little impression on J, because, after all, it had been fought with guns, bombs and other such backward weapons. The last three wars were the terrible ones. Electricity was used. An entire town could go into the sky at the slight touch of a button. A torpedo could be governed to sink a ship in the centre of the ocean by sending it from the shore. It was a world that was mechanically correct and soullessly inhuman.

J was more positive now than ever before. He could stand it no longer. Soon he was at the window and the volume was crashing down to the pavement below. That was the only way he had of expressing himself at the moment.

He paced the room talking to himself. His words grew louder and louder but only the solid walls heard. It was best. Over and over he said, "The world can better itself no more. There is no possible thing left to invent. Work is done by little more than thinking of it. The farthest country is as good as a neighboring state. There is nothing left for the world to do but rot in its own idleness! Nothing left for the world to do but get out of control because of its own clever-

ness!" He cried out the last before he threw himself into the nearest chair in hopes of suppressing his emotions.

That did little good. Still his brain was throbbing with thoughts. Now he was thinking of the language. Language now could never have been understood a hundred years ago. That, too, had changed to suit the time. More could be said in shorter sentences. There was hardly a lengthy word left. The entire world used the same money. "Everyone must think the same things," he spoke out. "It hasn't come to that, but it will, it will."

That had been the reason for the last three wars. If there had been a country that wanted to keep its old traditions and have its own government, it was an easy thing for the other nations to get it to join them, simply by a war. Sometimes a war was only hinted of. The stubborn nation would get the meaning of that. It knew the horror, and it was easier to give in. Once, some small kingdom stood its ground. It held out against the rest of the world. That was funny. Soon it was dust with only a few glass works of art to represent it in the story of time.

J knew there was now only one thing left that was individual. It was the only thing the world now held in deference. Half believed in a Creator. Must he soon part with his last ideal? There were hints that that was to go. And that was to go for the God of Electricity. The other half believed in it. It would be easy for the stubborn ones to be made to think a different way.

Gradually it became a public topic. Groups would form in the streets which had to be broken up by Guards of the Council. They held the peace for the Council itself—the Council that was the power. J would have liked to see the massive building that held it fall to the earth. One Council ruling the world! J would have torn the thing to shreds, were he able. Now, as their final step for supremacy, they were to take the thoughts from minds. They were to tell people what to think. J would keep his thoughts, though they torment him with hot irons. He would struggle to the end so that the world might find itself.

Electricity: the God

● The head of the Council had some very clever ways of showing people how great electricity was. By showing what it could do, he won many over to his way of thinking. For fear of what might happen, many weaker-willed persons openly spoke of how they were going to bow down before it. There was only one thing greater than X, the head of the council. That was the lightning fingers of Electricity. It had made the world. It had run the world. It could end the world.

Statements like that from X won over many more. It was the cry! It was about to become the new God! Electricity! Electricity!

Three-quarters of the world had proclaimed it. In J's mind, three-quarters of the world had thrown out their souls and were now to be even smaller machines than before. It happened! The only thing J knew would happen and dreaded. Houses were now being searched for the few remaining believers. That alone changed the minds of thousands more. Soon a pitiful handful remained.

J knew the mind that X had. Soon the last few would be herded to the Council and there forced to submit to another God. What would happen to those holding out against X? J hated to think. But he would be one.

Soon a patrol was sent out for the last worshippers of God. J gave himself up willingly. He was waiting for the day when he would come face to face with the man who was buying souls. Guards, clothed in the shimmering silver cloth that was their uniform, marched J to the Council. Up the endless stairs of stone to the great door, the small army went. Soon J was in the Council Hall with the others. He was surprised at the number. There were about one hundred like himself. The hundred wondered what would become of them. Outside, the millions waited to see the first one leave that door with his mind

changed for him. They would see him walk down the seven hundred steps to the street and they would cheer. Millions of people who now worshipped Electricity and bowed down to the blue spark would constitute the terrible Voice that would shout to the first man.

They could walk free to the outside world again if they would say, "Electricity is my God." Thousands must have said it to secure their freedom. This hundred would not.

X was the power that sat behind the impressive metal desk. Seventy-five had been led before him only to remain silent. Each was led to another room. Then each was put into an elevator. The door was closed and the car sped up to the floor marked 500. What occurred there was a mystery the rest of the world wondered about. J was now to find out. As the three guards dragged him before X, he kicked them. He certainly was the most rebellious of them all. He stood before X and glared at him. He tried to run behind the great desk to strike him. The guards now held him like iron bands. With great effort, he managed to kick the desk. His metal shoes scratched it.* Kicking X's desk was a sad thing to have done. When he would go to the floor 500, he would be given an extra treatment. He wondered what that might be. Finally he was pushed into an elevator.

In half a minute he was passing floor 400. Soon the brilliant numbers shown inside the car. It was the mysterious floor. Floor 500!

Methods of Torture

● The door snapped back and he was thrown out. He could hear the moaning of electrical motors. He stepped back in horror, for underneath that sound he could hear human moaning. Seventy-five voices all but hidden by a mechanical tone. J hated to think of what caused their moaning. Slowly he realized what caused the minds of so many to change. They had only to be shown what torture they might go through.

It was something that reminded him of a passage in one of his books. It had told about a Spanish Inquisition where people were tortured until they changed their minds. That was all it had said.

He was shoved into a small alcove. He sat down. It was dark. He knew someone was at his side. This man at his side was crying softly. All he heard the man say was, "Soon. Soon." J knew something would happen. He was right.

● Soon the alcove was lit by a white-blue light. There was nothing else in the room. He looked about. His eyes fell. They spied an electrical socket. Then there were footsteps. Two men with black masks pushed past them into the alcove. They closed a door. He found himself in a sealed room. One of the men carried a shining steel knife with an electrical cord extending from its handle. That was a queer thing. He knew that would be the first torture he would witness.

The cord was put in the socket and a small button he had not noticed was pressed. Soon the knife was an illuminated thing of white-hot steel. The other masked man held the man to be tortured. J wanted to turn away but was ordered to look or it would happen to him. He saw the other take the man's hand and separate the fingers. Then the knife was put to the base of his little finger. J closed his eyes. The little finger was on the floor. The poor man waved his hand about in the air. It was a hand with four fingers. There was not a sign of blood. That was a wonderful knife. It cut, burned and healed in one swish. The man wondered. There was no pain. He laughed pitifully.

Soon the men continued. They took his thumb. That also was soon on the floor. They went for his index finger. While they were holding it ready for the knife, one of the masked men asked, "Does this change your mind?" The poor man did not answer. Soon there were three fingers on the floor. Then the door opened.

Another masked man led J out of the

*Metal shoes were the only kind of shoes known. They were made of flexible metal invented in 5068. They lasted a lifetime.

room. He wondered if he were really awake, it was all so horrible and silently done. He was thrown into another room. There were four posts in the centre of it. In the middle of the room stood a naked man. What torture was this, J wondered, and why did he not go through with it? He soon saw.

Something was pressed and the torture began. The four posts had been made of metal. They glowed red now. Soon red tongues were flashing from them. They were on the way to that man's naked body. A voice in monotone kept asking, "Do you change your mind?" There was no answer and the sparks came closer. The ends of them touched the man. His flesh went red; then purple. He fell to the floor and the current was turned off.

J was hurried from the room. He knew that the next torture would be more terrible. It was.

There was a magnet that must have weighed tons attached to the ceiling. Directly under it was another. A man was made to stand upon it. He noticed that the man had been stripped to the waist and that a disc of thick steel had been tied to his feet. His hands were lifted above him. Another disc of steel was tied to his hands. He stood there with the weight not bothering him one bit. That was because the power of the electrical magnet held it in the air. Soon a man went to a switch. The wires would fill the upper magnet with power enough to lift the man. The lower magnet would soon want to hold its own steel on the man's feet. Soon it would be a battle of metal and electricity with the prize a human life. The man at the switch kept reversing the current. The power was switched into the lower magnet. It slowly started to draw down its living toy. Too slowly. The weight and strain showed on the muscles of the man's body. They stood out like cords. The veins were purple. Soon the muscles relaxed. The two powers all but snapped the man in two. The upper magnet was turned off and the man fainted only to be revived by some machine and then the torture was repeated.

It was hard to die in such an age. But death would have been welcome. J was taken out of that room. As he was led along a narrow hall, the moaning of the tortured man grew fainter in his ears. He was told that there was only one room left to visit, and then they would torture him; that was, unless he had changed his idea as to who the real God was. His lips were firm and he was taken through the door of the last room.

He was even a little anxious to see just what these fiends had thought up now. He soon saw. In the room, an immense glass jar stood. It was large enough to hold a man. There, at the other side of the room, some poor creature was being prepared for his ordeal.

The man was thrown into the glass jar. It held his body, but his head appeared above the rim. Soon a cover was brought that fitted tightly about the man's neck. Some tubes were fastened to the bottom of the jar.

Slowly, the man's firm body drooped lifelessly. Now it was tightening. Now all his blood was running to his feet. J knew why it did. The air was being drawn from the jar! The tubes at the base were causing a vacuum. So much power was now on that it was striving to draw the man out. His legs were swelling horribly. His face was terrible to look upon. He said nothing. Soon he collapsed. The power was shut off, and the blood ran back from his legs. Too quickly! His head was swelling. Then he became natural again and the torture was repeated.

It was endless. J had lived through a million years of suffering in less than one hour. He would admit, though, that in all that time he had not seen one man die. It would have been best, but that evidently was not what X wanted. X could not afford to be branded a murderer. He was gaining in power too nicely.

No one knew that it was X who had stimulated this affair. It was X who was slowly becoming the ruler of a land that had not been ruled by a king for centuries. It must have been, that when X had

stared into J's eyes less than an hour ago, he had seen a fire that told him to beware, that he had found a man mentally his equal. This was why J was suffering the pains of the others before it would come to himself. It was just as well. It was giving him time to think—thoughts that would mean nothing in this inferno of Electricity.

He was soon in a room where he himself was to be tortured. Leaping from a hole in the floor was a blue column of electricity that seemed to have magnetic powers. It was to draw J into its flame and sear him beyond recognition. There seemed nothing else for that flame to do. J, nevertheless, marveled at the devices in the place. This one seemed the most certain death. It was saved for him! Ingenious X!

One of the masked men let out a cry. He had walked too near it and was being drawn to his death. J pushed his other guard aside and tried to save the dying man. His strength was enough to drag the masked man to safety. He had saved a man about to kill him. In the struggle, the mask had fallen. J saw someone like himself. The man broke all the laws of that strict Council to thank him. The other guard seemed to sympathize, also. Soon there was a conversation. He was asked why he had saved a man who was about to torture him beyond hope.

J told the man that it was because he did not blame the individual at all. He told them that he blamed the master mind. He purposely said that the individual was not capable of thinking for himself, because if he did, they would see the wrong of the inquisition and the motive of some power behind it. The guards seemed to be thinking. J knew that the time had come to carry out his plan.

Revolt!

● He let them think a moment. His plan was working! The guards were thinking for themselves for the first time. And they were thinking unfavorably of X. J kept maddening the two men. If they could, they would have stopped the whole thing now. J could see it. He suggested his idea to them. Soon it was three in revolt.

Revolt! Revolt! Every step they took sounded of it. They started by smashing all the lights on the way down the hall. One of the men went into a secret room and came out with rods of steel and wire netting. They struggled by the others in one of the torture chambers. The power was on high, and J threw a piece of netting over the machine. It did what he wanted it to. It short circuited and there was a flash. Every light on the floor went out. In the dark, J and the two men divulged their plans to the others. It was unanimous. How long these masked men must have been crying for freedom!

Soon the entire floor was in an uproar. They were all for J. They did as much damage as possible on the way down the hundreds of steps. They were on their way to the emergency car. It was a mammoth affair. The operator was at the mercy of the crowd and consented to take them down.

Down the 500 floors the crowd went and were soon in the Tribunal Hall. Down they had all come from out of the Heaven of Hell. Down from out of the clouds that once bled human blood. Down and on to the man who was the cause—across the polished metal floors in a body. Slowly they neared the desk of X. He was staring like some king about to be beheaded by his own people. It was nearly that. On the crowd went. The look in the eyes of X seemed to say that he knew what was about to happen. He appeared to know what had happened. His crafty mind would tell him that.

J was looking again into those same cruel eyes. "Now you will change *your* mind," he leered into his ear. His stone face changed with lines of fear. J shouted out, "On with this man to the death he planned for others!" The crowd joined in the cry. "Anything but that! Anything," came from a once set mouth. It was a cowering cry of a fiend about to get what he deserved. The crowd laughed.

The yells of the mob penetrated the

strong walls of the Council and drifted to the ready ears of the outside world. The streets were crowded with a swarming mass of living things. The thousands of windows were dotted with humans. There was no single space that was free of people. The steps leading up to the Council were edged with them. Their steady mumble was now diminished in order to hear those strange sounds coming from inside the walls. Walls so thick that they would stand a bombardment were not conceived for a moment to let human voices ring out of them. There must have been many voices seeping through those walls of granite and steel. Soon the mob outside was entirely silent, save for an odd word as to what might happen. A million eyes were on that door at the top of the steps. A million minds were waiting to jeer a man who was forced to give himself to Electricity.

The tremendous door was slowly opening. Someone was about to leave. Slowly a tiny figure, dwarfed by the columns at the sides of the door, sulked out. The mass looked again. That was funny! It was not one of the hundred who had gone in. It was someone else and the word soon spread to those who could not distinguish his face. It was X. X was the man standing hopelessly at the entrance of that gigantic building. And it was J's victory.

A crowd that wonders cannot remain silent long. There was whispering that was turning into a rumble. That would be followed by shouts. J wanted to avoid a panic.

Many a speech had been made at the top of those steps. It was necessary to press the button that switched on the amplifiers that would make it possible to hear what was said miles away. J had often heard speeches from that place. He sent one of the men to turn it on so that his voice could be carried to the millions. He started: "Citizens. The power of electricity has helped us to achieve this wonderful world. It is something we can thank man for and it is something that we needed. But it has gone too far.

"Should we bow down to something just because it can kill? Should we bow down to something just because someone says we should? Should we not think as we wish?" His voice rang out over the city and resounded back against the building. He was winning a crowd that a moment before might have started a revolution.

He continued. "Should some master mind control our very hearts?

"Should we be told whom to love? In all this wonderful but terrible city of machines and walls are not our minds the only things that are real? Do not our hearts beat with the blood of thought? Must we become the animated plaything of one man? One master mind? There!" J's finger pointed to X. The crowd was now hissing. The heavens were growing dark. The steps that had sparkled in the tiny bit of sunshine that had shone on them were shining no more. The city was no longer lit by man-made light because the Council was also the generator of the city's electrical supply; and had not the crowd that J led wrecked it by short circuits?

• J's voice continued to fill the dark air.

"Look! It is growing black. Control that with your electricity if you can. Make the sun shine out again if you can. Why not bow to the power that controls them?" He was a glorious figure on the top of those steps. So small, but so dominant, and with a voice that was made to sound as though it came from the lips of a giant.

Soon it was only a voice that could be heard. The darkness had blotted out every sign of life. A storm was upon them. J yelled to X: "Stop that if you can!" Then J waved his arms over his head and shouted so that his voice would reach the highest part of the sky, "If there is a greater power than electricity made by man, let it strike!" His voice must have been reaching the ends of the universe. "Let it strike this master-mind dead!"

At that moment, a rod of fire opened in the heavens. A beam of lightning struck at the top of the steps. It found

(Continued on page 531)

EVOLUTION SATELLITE

By J. Harvey Haggard

(Continued from page 439)

things. The sea, the jungle, the monster; all revolving.

How can I give those next moments' impressions? It is so difficult to describe the colossus as it staggered blindly past the clearing onto the steep decline of the jungled hillside below, just as it is hard to portray those impressions flashing through my vision as I was suspended above the gory stumped head of the monster as it thrashed in its death agony down the hillside; it all defies description.

It was much more like a Gargantuan dream of horror; of huge magnified forces—or of infinite powers, released.

The huge body plunged and threshed about the sea of vegetation which lashed up into eager gnashing mouths. My body span through the skies, borne by convulsive tentacles, whipping through the night, lashing about in death agony. My body felt crushed and twisted. The blue beam of light, however, still parried through the night from the ray-gun I held in a death-like grip.

Then, through the dim unreal kaleidoscope of horribly dynamic action, I became aware that the tentacles were forcing me back—far over and down toward the back of the monster — toward those mouths distended and gaping upward waiting for me. Horror!—it made a madman of me then!

Kicking, squirming, cutting across the sky again and again with my ray-gun, I slashed down toward the great body. I swept it across the monster—back and forth across the broad back, searing great furrows of blood and gore across the body.

The monster winced under the terrible pain. His back knotted and contorted; gathered itself convulsively. And the blue ray bored on.

Then the last death jerk. The body crumpled and swayed. The tentacle which held me tightly about the waist lashed up, whipping me far overhead.

My ray-gun span from my hand into the darkness. Then I was hurtling, spinning in a great arc, thrown from the catapult of the dying monster's last energy. The jungle sea lashed upward with eager growing patterns of luring vegetation as I shot quickly overhead. Then it caught me—those tendrils—had leaped up and about me. My body was caught in a suffocating cushion of massed twigs and branches which enveloped me into a dark oblivion.

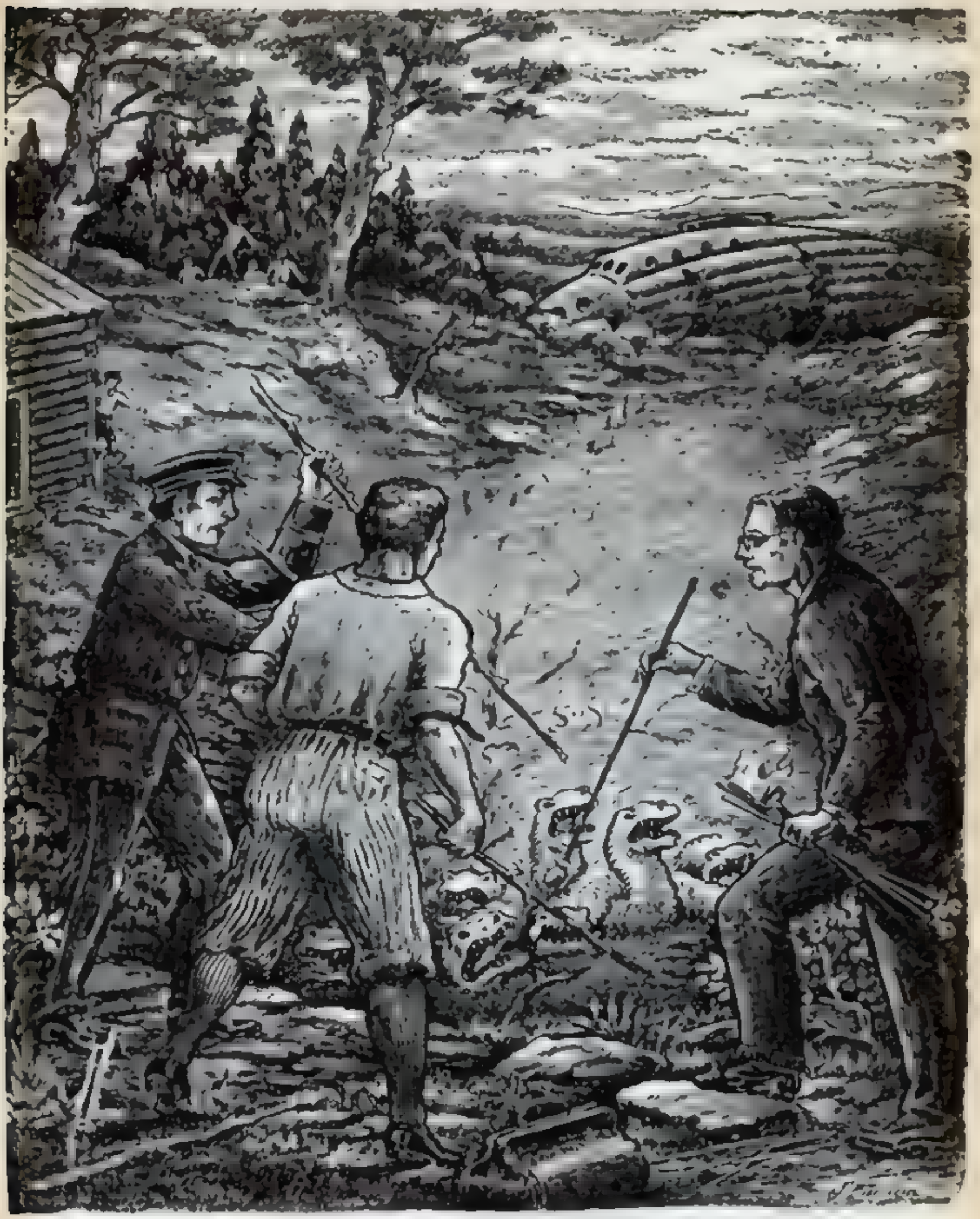
I lost consciousness.

(Concluded next month)

WHAT IS YOUR SCIENCE KNOWLEDGE?

Test Yourself by This Questionnaire

1. How many moons has Uranus? (See Page 424)
2. What is the approximate average diameter of the moons of Uranus? (See Page 424)
3. About how far is Uranus from the sun? (See Page 426)
4. What is the distance of Procyon (in parsecs)? (See Page 452)
5. How long is a year on Mercury? (See Page 483)
6. What is neutron? (See Page 490)
7. Why does water expand upon freezing? (See Page 533)
8. What is the third dimension? (See Page 533)
9. About how many asteroids have been catalogued? (See Page 534)
10. Give a simple explanation of time-travel in one sentence. (See Page 538)



(Illustration by Burian)

The blue stain, growing less intense as it dissolved, rapidly spread throughout the creature.

INVISIBLE MONSTERS

By JOHN BEYNON HARRIS

● In the past, man has battled with monsters which he could never overcome. The law of self-preservation forced him to fight for his life, even though he knew it was useless. Consider for a moment the hopeless task it would be to combat an invisible creation. You could not observe his methods of attack. You could only be his astonished prey.

In the present story, Mr. Harris presents an unusual angle of this theme. Here is a touch of horror mixed with the utter alien, good science, and an exciting narrative, realistically told.

● Toby Horning was doing culinary things with a frying pan, a saucepan, and an open fire which flickered and sent up a shower of sparks in direct challenge to the laws of the district. David Fordyce sprawled comfortably, pipe in mouth, and watched him. Toby was vain about his cooking. When he camped, he liked to do the thing properly—none of the civilized oil-stove business for him. The third member of the party, Dirk Robbins, sat a little apart repairing a leak in an ancient kettle. David turned lazily and stared out towards the rolling country which lay beneath their hilltop camp. It was dim and a little misty, with only the stars and a dim crescent to light it. Here and there he could distinguish bright points of light many miles away. Some of them he knew for the lighted windows in farm-houses. Others, crawling like sluggish fireflies through the blue night, were the headlights of automobiles. From a point well beyond even his extended horizon, the shaft of an aerial beacon aspired heavenwards in a slim post of light. Away on the left, he became idly aware of a bright spot hitherto unnoticed. As he gazed, trying to place it in the familiar landscape, it seemed to grow in intensity.

"That bus must be moving some," he said, removing his pipe and pointing with the stem.

Dirk looked up from his kettle and studied the growing spot of brilliance for a moment.

"Coming pretty near us from the looks of it. She must be big, too, to be carrying a light like that. Wonder what she's doing around here? The main air line is miles to the south, beyond the beacon."

Toby looked up, grunted, and returned to his cooking.

"Can't get peace anywhere nowadays," he growled. "The whole ruddy world is nothing but a hustling pandemonium. Where's the sense in all this rushing about, I'd like to know?"

The others did not reply. They knew Toby's pet grumbles of old. Instead, they watched the searchlight growing as it rushed towards them.

"Right off her course, and Lord, isn't she travelling?" David repeated.

● The nearing ship, seen from the front, appeared as a black circle silhouetted against a nebulous halo of her own exhaust gases. David grew a little alarmed with the sense that something was wrong on board. They could hear no sound of her rockets as yet, but it was obvious that she was travelling low, cutting the dense atmosphere at stratosphere speed; a dangerous game to play, to say nothing of its illegality. Something very serious indeed must be amiss to let her captain take such a risk.

"Damn' foolery," muttered Toby. "She's less than a thousand feet up—mind your ears."

Still there was no sound, for she was travelling at a greater speed than her own noise. She hurtled on, passing a bare hundred yards to their right. The three crouching men with fingers tightly jammed in their ears, saw her lines of lighted portholes only as bright streaks. The plume from her rockets stretched out like the tail of a minor comet behind her. Only as she was almost level, did the thunder of her tubes strike them. First, great waves of sound buffeted them like physical blows which would have hurled them to the ground had they been standing. It was followed by a wind which scattered Toby's fire, brought a groaning and crackling of branches from the trees close by, and strove to tear the clothes off their backs. Finally came the surges of hot, sulphurous fumes which caught their throats and set them coughing. Their heads turned to follow the modern dragon as she sped by. Toby's lips were moving. His words were inaudible, but his expression told all that was necessary. A moment later, the rocket haze was dimmed by a mighty spurt of pure white flame. The sound came rolling back to the three watchers—a mighty detonation capping the roar of the rockets. Then silence—and darkness.

The men removed their hands from their ears and stared stupidly at one another.

"Lord," said David, shouting above his own temporary deafness, "what a hell of a smash."

"He was riding for it and he got it," said Toby.

Dirk turned to gaze again in the direction of the final flash.

"Do you think we ought—?" he began.

David shook his head. "No good. We'd never find her in the dark, and not a man could have lived through that, anyway. We'd better wait until morning."

Toby grunted, but said nothing. In an embittered manner, he began to collect materials for a fresh fire.

● In spite of an early start, it was eight o'clock before they reached the wreck. Tracks were both scarce and faint, so that it was impossible to take the car nearer than a mile and a half from the scene. For the rest of the journey, it was necessary to march through the pine woods.

The ship had come to a final rest in a clearing. Behind her lay a furrow of shattered and scorched trees ploughed away by the onslaught. To all appearance, she had made an effort to clear the top of the hill and failed by two or three hundred feet. Her stern portion was tilted, so that the gaping rocket tubes pointed up to the skies. Her bows were an unrecognizable and tangled mass, while her middle was split into several sections. It was evident to David that, even in her crumpled condition, she was one of the biggest rocket ships he had ever seen. Looking at her with the memory of her speed fresh in his mind, he was surprised to find that she had retained even the semblance of her former shape. They stepped from the edge of the tree belt and crossed the open ground together. It was Dirk who asked the question which had begun to trouble them all.

"What is she? She's obviously Earth built, not Martian, but she's like nothing else I've ever seen."

Too narrow in the beam for a liner, bearing none of the characteristics of a warship, she was, nevertheless, far too large for a private craft and had shown a turn of speed which would be hopelessly uneconomic in a freighter. The nearer they drew, the more she puzzled them. David led the way to the bows; he was certain that he had seen a ship of these unusual proportions once before, but he could not recall the circumstances to mind. They stopped and surveyed the wreckage. The massive plates of steelium were crumpled and crushed as though they had been paper. Jagged ends of twisted framework protruded here and there, gleaming like picked bones. The identification number on the bow was buried somewhere beneath the pile of interlocked rubbish. David was about to turn back to the stern when Toby gave an exclamation. At his feet lay a severed section of steelium, and faintly, the outlines of three letters could be traced upon it.

"K-A-N," he read out. "What on earth does that mean?"

David frowned. He was trying to grasp something dimly remembered. It almost eluded him, then he had it with a rush.

"The *Hurakan,*" he cried. "I remember now. I saw a photograph of her before she sailed. This is she, all right."

His two companions looked blank; the name conveyed nothing to them.

"What was she?" Toby asked at length.

"Explorer. She set off—must be seven years ago. Was to have been the first ship to leave the solar system."

Dirk shook his head and professed to remember nothing of the affair.

"You wouldn't. They did all they could to keep it quiet. There'd been such a lot of crashes about that time. I had it from a pal in the Rocket Service. He showed me the picture of her. A beautiful ship if ever there was one, and all the brains of the nation went into her building."

Toby gazed at the shattered remnants. "All the brains of the nation," he repeated, "and the lives of good men—all for this. What fools we are! Where did she go?"

"I don't know anything beyond the fact that it was intended to take her out of the system. Perhaps she never accomplished it, but I fancy she did."

"Why the odd name?" Dirk asked curiously.

"*Hurakan?* Oh, he was an old god who managed the thunder and the winds."

"Well, she certainly thundered last night."

● As Dirk spoke, they came opposite a gaping crack in the hull. Toby paused, suggesting that it made a convenient entrance for exploration. The other two, after a momentary hesitation, agreed and followed him within. They found themselves in a well-built sleeping cabin which had been unoccupied at the time of the crash. David was thankful for that. He was not hankering for unpleasant sights. Toby strode across to the door in the opposite wall and tugged at the handle. As he expected, it was jammed and considerable leverage was necessary to free it. When at last, beneath their united efforts, it did give way, the three found themselves precipitated into a main corridor. Toby had had the forethought to come equipped with an electric torch. He drew it now and flashed the beam around. To the left, leading forward, a tangle of twisted metal choked the way, but to the right, the floor stretched away bare and empty, jerked from the straight, where the sections of the ship had strained apart. They had taken only a few steps, when a splintering crash somewhere towards the stern made them stop short. David jumped at its unexpectedness.

"What was that?" he asked uneasily.

"Cooling off, probably," Dirk guessed. "She would be in a fine state of heat by the time she hit. Some bits of the wreckage must still be contracting."

Nevertheless, there was a discouraging eeriness about these sounds aboard a dead ship, which none of them relished. Perhaps, David thought, they had been mistaken, and someone had managed to survive the impact. He raised his voice in a hail. The echoes sped depressingly about the metal walls, but there was no reply.

Toby led on. Thirty feet along the corridor, a door to the left stood slightly ajar. They pushed it back and found themselves in a small living room. The furnishing was simple, consisting of a desk, a table, three or four chairs, and a bookshelf with bars to hold the books in place. But the discovery which most interested David, was that the walls were lined with charts. The constellations and groupings, he noted, were shown in black, but among them wandered a red line. His knowledge of three-dimensional navigation was crude school-room stuff, as was Dirk's, but the two of them became interested, and began to examine the red line which they took to indicate the voyage of the *Hurakan*. The diagrams held little interest for Toby, and with a word to the other two, he left them to continue his explorations.

The inference, which David drew at length, was that the *Hurakan* had been exploring the system about Procyon. The discovery found him the more puzzled. The ship had set off seven years before, but

he remembered Procyon to be 3.2 parsecs distant. To get there and back would require almost twenty-one years travelling at the speed of light. He pointed out the discrepancy to Dirk. The latter shrugged his shoulders.

"I never understood why the speed of light was the theoretical limit. If these lines are right, it means that somehow or other, they passed that limit. Just look at the dates."

● David bent closer to inspect the minute figures scratched alongside the track. They indicated a speed which made him gasp. He began to speak, but a sudden sound stopped him in mid-sentence. The same cracking, crushing noise which had startled them before, became audible again. This time it was far louder and seemed closer. Hard upon it came Toby's voice, calling them. They stared at each other. The cry was repeated with a note of alarm, and with one accord, they made for the door.

A few yards away, the ship's broken back had caused the floor to tilt upwards, and as they scrambled up the slippery metal, they called back encouragingly. The quality of the second cry was hard to associate with Toby. It gave a sense of rising panic. A rattle of pistol shots ahead spurred them on. What was there to fire at? David wondered. Perhaps others had found the wreck before they had.

"Where are you?" he called.

Toby's voice answered from the right, and simultaneously there came another wrenching creak of metal. David thrust back a door and the two of them stood gazing within. They faced a square storeroom. The walls were lined with deep shelves and rows of lockers, save for a space in the middle of the right-hand wall, where both shelves and the partition behind them had fallen away to reveal a dark aperture. The light from the two small portholes was uncertain, but it seemed to David that the edges of the dark gap bulged and bent even as he looked at them. Away in the left-hand corner crouched Toby, his eyes fastened on the dark hole.

"What—?" David began, stepping into the room.

"Stop!" Toby switched his gun on him. "Don't come a step nearer—there's something nasty loose about here."

The pair noticed that their arrival had taken the note of panic from his voice, but, for all that, his manner was tense.

"But—"

"For God's sake, do what I tell you! Now stand back and hold that door open—and clear right out of the way. I've got to jump."

David obeyed wonderingly. There seemed no sane reason why Toby should want to jump. Puzzled, he watched the other kick off his shoes and throw down his jacket. He tossed his pistol across and crouched tensely. Both of his friends knew him to be the possessor of no mean muscles, but the power of his standing jump amazed even them. Toby launched himself in a magnificent leap which would have done credit to an acrobat. It was superb; but it was not enough. In mid-air he was suddenly checked. The others gave an astonished cry. Toby had struck something—an invisible something which stood between them. For a second, he seemed to hang in the emptiness, scrambling madly with legs and arms, then he began to slip, first slowly, and then more rapidly, for all the world as if he slid down a curved surface to the floor. David and Dirk stared in stupefaction as the other struggled and fought with wildly threshing limbs against something unseen. David broke the spell and took a step forward, but Toby noticed the move.

"No, no, go away," he shouted. "I'm done, I—" His voice broke into a scream of agony and his body slumped inertly.

Half-way up one thigh a deep line appeared, then, as though severed by an ax, the leg came away with a jerk. But it did not fall; instead, it started to drift slowly across the room. With incredulous horror, they saw that the limb was unsupported. It travelled some nine inches above the ground, creeping with a steady, unswerving motion towards the break in the wall. Foot first, it edged inch by inch out of the room into the blackness beyond. David's

senses were reeling. He felt Dirk's grip on his arm and tried to speak, but his mouth was queerly dry. He forced his eyes back to the fallen Toby, and caught a sudden breath. An arm, like the leg was being detached: the same sharp indentation, but still no visible agent. As the arm jerked free, he saw that the denuded shoulder was scored by deep grooves.

He sprang back, pulling Dirk with him. Both knew that Toby was far past all help, and in a wordless panic, they clattered and slid down the sloping corridor to seek safety in the open.

CHAPTER II

Official Investigation

● A five-mile dash in the car brought them to the townlet of Clidoe. In the police station, they poured out a confused statement to a stolid and unsympathetic sergeant. There was reproving suspicion in the glance with which he favored them. An excited entrance coupled with rambling incoherence was, in his experience, frequently to be associated with excess of alcohol. Accordingly, he hid his likable, though not very brilliant self, behind a stern and chastening stare.

"Just who are you and what are you doing?" he demanded.

David gave their names and explained that they had been on a camping tour. The sergeant approached and scrutinized them more closely. They were excited, but he had to admit that they showed none of the signs of intoxication. Furthermore, the time was barely eleven o'clock.

"Well," he said, returning to his desk and picking up a pen, "suppose you tell it to me all over again, but slowly this time."

Evidently, the alcoholic theory was merely shelved, for his tone was not encouraging. David pulled himself together, and with occasional promptings from Dirk, recounted the affair in orderly detail. The sergeant listened throughout with an air of defensive reserve more than tinged with disbelief. At the end of the recital, he said:

"I've had a report that a ship went by at an excessive speed last night. What did you call her?

"The *Hurakan*." David spelt out the name. "You'll find out about her if you ring up Interplanetary Explorations."

The sergeant grunted. "Now just what was this—er—assailant like?"

"That's just what I've been telling you. It wasn't like anything. You couldn't see it."

"It was too dark in the ship?"

"No, I tell you, it was invisible."

"Invisible, eh? And yet it killed a man?" His voice was a trifle weary. "What's this you're trying—a hoax?" he demanded with a sudden change of tone.

He watched them keenly while they both protested vehemently. He had no longer any doubt that the men had received a shock, but this yarn was pretty much like spook stuff . . . . He pulled one ear reflectively and frowned. The matter would have to be cleared up.

"Rankin," he called over to a constable, "you've heard these men's story. Get along now and check up on it."

"Yes, sir." The constable saluted and turned to go.

"I'll show you the way," David suggested.

"No, can't allow that," the sergeant said firmly. There was something queer behind this. At any rate, one man was dead and he was taking no chances. "I'll have to ask you to stay here until Constable Rankin makes his report."

"But you don't realize! This thing, whatever it is, is dangerous, damned dangerous. We could show—"

"No. If it's serious, I'm going to hold you—if it's a joke, you're going to pay."

The two gazed helplessly at each other. Dirk shrugged his shoulders.

"Oh, all right." David subsided on a hard bench and gazed moodily at a framed card of police regulations. "But don't blame me for anything that may happen," he added. "I've warned you."

Constable Rankin strode unemotionally out of the station, and they heard him start up a motor cycle. The sergeant began to make laborious notes with a scratchy pen.

● Three hours later, at almost two o'clock, the sergeant began to look worried. There had been ample time for a ten-mile ride and a cursory examination. He began to feel misgiving sharpening into definite apprehension. He plied the two men with a fresh batch of questions, and the answers did little to relieve his mind. Neither David nor Dirk had any doubt as to the reason for Constable Rankin's prolonged absence, and they said as much. The thought of the man calmly walking to such a death stirred a queasiness in their stomachs.

"We'll give him another half-hour. If he's not back by then, we'll go and have a look," the sergeant said uneasily.

It was after three when they arrived, reinforced by two constables, at the spot where they must leave the car. David led the silent party through the trees. The two reserve policemen strode forward with puzzled stolidity, while the sergeant wore a look of worry which showed that his disbelief had weakened. As they came within sight of the fallen ship, he drew a whistling breath.

"Lord, what a ship—and what a crash!" he murmured. His attitude to the others underwent a subtle change as he asked: "Now, at which break did you enter?"

David pointed to the gap near the bows. "Through there," he said, "and we began working back to the stern. The storeroom must have been about amidships." He felt a little sick at his memory of that room. The sergeant nodded.

"You lead the way and show us exactly what happened," he suggested.

David and Dirk both shook their heads emphatically.

"I'll be damned if I do," said the former. "I've told you how dangerous it is—and then you tell me to go ahead. That's not good enough."

The sergeant gave a contemptuous snort and motioned his men on. They were halfway across the clearing when there came the sound of splintering, yielding metal. The two friends looked at each other and hesitated.

"What's that?" asked the sergeant sharply. "Somebody looting her, I'll be bound. We'll catch 'em in the act."

A few yards from the break, he halted and began to give instructions in an undertone. After one sentence, he was interrupted by a further creaking and wrenching of metal plates. Then they all swung about and gazed sternward. Incredulously, they saw that the side of the ship was bulging. One of the plates of solid steelium was bending outward. Fascinated and speechless, they watched this toughest of metals bulge still farther. The sergeant gasped audibly, for he knew the well-nigh fabulous strength of the material. The rivet heads stripped off with a rattle like a monster machine gun in action, and the plate fell outside with a crash. The five men continued to stare nervously, but nothing emerged. Whatever had provided the tremendous force behind the plate remained unseen. The sergeant pulled himself together with an effort.

"We'll start there," he said. "Keep close to the hull as we work up, and we'll take them by surprise."

● David and Dirk hung back and did their best to dissuade him, but he was not to be turned off. His manner held a curtness which covered no little misgiving. The party edged along beneath the overhanging side of the ship. Eight feet from the recent hole, their fears were justified. The foremost policeman gave a sudden bellow and leaped back.

"What the—?" the sergeant began, but his words dried up and his eyes widened in astonishment. Pain was ousted momentarily by surprise even in the injured man. He stood with blood streaming from his severed wrist, gaping inanely at his lost hand as it floated slowly away in midair. David snatched a handkerchief from his pocket and sprang forward to make a tourniquet. The sergeant recovered rapidly from his first shock, hesitated and seemed about to advance.

"Don't be a fool," said Dirk, gripping his arm. "It'll get you, too."

The other retreated a pace, his eyes still fixed on the moving hand. Without audible

comment, he watched it drift into the dark opening. As he turned to the others, his face was pale.

"I've got to apologize to you gentlemen. I didn't realize what you'd seen. And to think I sent poor Rankin—" He broke off at the sound of creaking metal. The plates to either side of the original hole were bending and sagging ominously. The party beat a hasty retreat, carrying the injured man now in a dead faint. In silence, they watched the contiguous steelium being torn slowly and relentlessly from its rivets until there was a hole in the *Hurakan's* side four times as large as before.

David, at a safe distance, circled around to catch a glimpse of the interior. He was looking, he knew, at approximately the spot where Toby had met his end, but the walls of the storeroom were now reduced to so much warped and mangled metal on the floor. Of the broad wooden shelves and lockers which had lined it, there was no sign. Vaguely, he wondered what had become of them; they ought to have been lying crushed with the metal. The sergeant came up to him with all dignity cast aside. It was evident that he now felt well out of his depth.

"I'll have to get help. Will you take a message for me to the police station? And there's Dawkins, too," he nodded towards the injured policeman. "He needs treatment as soon as he can get it. If you and your friend would take him in the car while we keep watch here—?"

David agreed. He waited while the sergeant scribbled a note, then he and Dirk, bearing the unconscious man between them, moved off towards the car.

At five o'clock, after they had dropped the unfortunate Dawkins at the hospital and had reinforced themselves with a good meal, they returned to find that the force of police at the *Hurakan* had been considerably augmented. The sergeant greeted them with undisguised gloom. He pointed out that the hole was much enlarged and that further plates had been wrenched off in other parts.

"Hanged if I know what to do," he admitted. "The inspector ought to be along any time now, thank the Lord. Though I don't know what he'll be able to do about it either. Just look at this."

He picked up a stout branch some three inches in section, and holding it extended before him, advanced cautiously towards the gaping hole. A six-inch length was cleft away with a crunch. He retreated hurriedly and came back pointing to deep, gouged grooves in the wood.

"Teeth," he said, "not a doubt."

David nodded. It reminded him unpleasantly of Toby's shoulder. He looked quickly back at the ship and remarked on the number of fresh breaches in her sides.

"And that's not all." The sergeant indicated a small bush which grew four or five yards away from the ship. "Watch that," he said.

● The bush was cracking and bending towards them beneath invisible pressure. It gave way as they looked and was crushed into a mass. Then it lifted slightly above the ground and began to drift in the wake of the piece of branch on a slow journey to the ship.

"It's big and it's advancing," added the policeman. He picked up a stone and tossed it high into the air. Its curving flight towards the hull was uncannily interrupted. It hung for a moment before rolling a yard down and sideways. Then it rested, to all appearances unsupported and stationary save for a slight, pulsating rise and fall. All the watching men felt a touch of that trepidation which is bred by the incomprehensible.

A startling shriek from the other side of the ship stung them into action. They rounded the stern to collide with a group of men and women travelling at a surprising speed.

"What's wrong here?" the sergeant demanded.

One of the men pointed behind him and shouted something unintelligible as he ran on.

"Damned sightseers," puffed the sergeant. "Just as well they're scared. Can't they run, though?"

With a full view of the other side, they stopped. The reason for the runners' panic became plain. One sightseer would pry no more. His body, in dismembered sections, was drifting towards the ship.

David looked at Dirk and then turned to the other. He was feeling sick with the sights of the day and suggested that they might be allowed to leave. The sergeant nodded.

"Yes. It wouldn't do me much good to keep you here now, but I'd like you to be handy tomorrow—the inspector may want to have a word with you both." He produced a large handkerchief and mopped his face. "That is," he added, "if the inspector ever turns up."

CHAPTER III

Plans to Destroy the Menace

● The two succeeded in finding a passable hotel in Clidoe, and returned the next morning to find that the inspector had at last arrived and taken command. Little had been possible during the night beyond the posting of guards to warn off the curious, but with daylight, a phase of activity had set in. A judicious tossing of stones had determined roughly the extent of the danger area, and it had become apparent that it now extended all about the ship in an approximate oval. The actual verge, however, was by no means regular, since here and there invisible extensions projected three or four feet in advance of the main substance. Rows of sticks planted at regular intervals had enabled the average speed of advance to be estimated at something over a yard an hour. The sergeant, again on the scene, greeted them and expressed his doubts of the value of this calculation.

"It may be," he pointed out, "that this is not an advance at all, as they mean it, but merely the normal rate of growth."

"God forbid," said David fervently.

"What scientists have they got on the job?" asked Dirk.

"None. They reckoned they could tackle this thing all right without them—it'd mean extra expense to bring them along."

Dirk grunted. "Probably save you expense in the end," he grunted.

They looked out across the clearing. Save for the increased number of holes in her sides, the *Hurakan* looked just as they had first seen her the previous day. The sunlight bathed her, glittering in sparkling flashes from her polished plates. To all appearances, there was nothing amiss between her and them; nothing to stop one from walking right up to her and entering. Staring intently, one could fancy, perhaps, the slightest haze about her, something more tenuous than rising heat, but enough to make the edges not quite sharp. Nevertheless, David realized, that unwarned, he would have walked right into the invisible trap without a suspicion. With the handing of his duties to the inspector, the sergeant's spirits had become more normal. The other had taken over without enthusiasm, and was now a troubled man. He nodded in a depressed way to David and Dirk as they were brought up and asked a few questions in a tone which showed that he expected little help from them. A few minutes later, a man in military uniform strolled across from the protecting cordon and introduced himself. He was, it seemed, a Captain Forbes and not unpleased with the fact. He gazed across at the *Hurakan* in a bored style, and his manner was a blend of faint amusement and superiority. He spoke of his commander who had sent him, but had given no reason.

"Well, Inspector," he said, "you've certainly managed to stir up our people—they've sent me along to reinforce you with a party of men and a machine gun. What's it all about?"

The sergeant explained the situation again, and the inspector, though he had heard it before, listened to his subordinate with an expression of increasing anxiety. At the end of the report and David's description of Toby's end, he nodded slowly and gazed thoughtfully towards the ship.

"As we have no more evidence to go on, we must conclude that the crash killed all aboard and unfortunately set free some specimen they were bringing home with them. It's the only way to account for this

thing. You concluded from the charts you saw that the ship had been outside the solar system."

"They seemed to prove that it had been to the Procyon system. Besides, I happen to know that the ship was built with the intention of exploring free space," David replied. The sergeant broke in:

"That's right, sir. A message to that effect came through this morning."

● The inspector's eyes narrowed. There were queer enough things within the solar system—heaven alone knew what monstrosities might exist beyond it. Captain Forbes, with a scepticism born of little imagination, broke in:

"But all this sounds absurd. What do you reckon the thing is?"

David disclaimed all pretense of knowledge, but suggested that it was some kind of animal—it might equally well be a plant, he admitted, but he thought not.

Captain Forbes smiled with a kindly tolerance, lit a cigarette, and began to saunter towards the ship. Dirk caught him by the arm.

"Don't be a fool. I don't blame you for not believing us, but take a look at this."

He caught up the branch which the sergeant had dropped on the previous day, and exhibited the teeth marks. The captain examined them with close attention. He lost his ambition to advance at the moment. The inspector turned to David.

"You've thought of no way of tackling this thing?"

David shook his head. Dirk chimed in: "I've thought of one thing which may or may not be important."

"And that is?"

"To prevent it from reaching the trees, if possible. You notice that it has consumed all the wood it has found. That may be merely a method of removing obstruction, but I doubt it: it didn't deal with the metal that way. I shouldn't be surprised to find that it feeds on wood."

With his eye, the inspector measured the distance between the wreck and the trees—a quarter was already covered in the majority of places. Captain Forbes fidgeted impatiently.

"Look here, Inspector, I know this is your show, but what about letting me try my machine gun on the thing—that'll tear it to bits."

The other hesitated and then agreed. He had little faith in the power of a machine gun against the creature, but no harm seemed likely to result. As the captain strolled off, a thought struck him, and he scribbled a few words on a piece of paper which he handed to a near-by constable with instructions to hurry.

A puzzled-looking party of machine gunners arrived and was steered into position a few yards from the danger line. When it was explained that they were to set up their weapon at this spot, they appeared at first resentful and then amused. They planted the gun with the air of men who humored the half-witted.

"Bit o' target practice—only there ain't no target," muttered one of them.

The gunner settled himself.

"What do we aim for, sir?"

"Just aim straight ahead."

The man shrugged his shoulders nonchalantly and drummed a short burst. The crew gasped audibly. Each bullet had uncannily mushroomed out and now hung, a splotch of lead, in mid-air.

"Say, I don't get this," one of them muttered nervously. "What the hell is it, anyway?"

The gun choked out another rattling burst with identical results. David shot a sidelong glance at the captain; the expression of the latter was highly gratifying. The gunner turned an astonished face.

"Any more, sir?" he inquired.

"Look out," shouted David. The blobs of lead had risen and surged forward. The gun crew, now thoroughly rattled, jumped back. One man tripped over the tripod and fell. There came a crunching sound followed by a cry of agony—the man's boot, with his foot still inside, began to move slowly away. His companions turned and dragged him back.

● Captain Forbes's face turned a peculiar color as he stared foolishly at the severed boot. For the first time, it seemed to dawn on him that the affair was not a hoax, after all.

"Well, your machine gun hasn't cut much ice," commented the inspector unkindly. "When they bring the stuff I've sent for, we'll try another trick."

They were forced to wait for half an hour before a small party appeared carrying a bulky object which a closer view revealed to be a bale of cotton waste. Behind them followed two more men carrying gasoline cans.

"Soak the stuff," directed the inspector as they lowered it. "Pour the lot over it—and get some long poles."

The lighted bale flared furiously. Four men approached and began to lever it forward with the poles while the rest stood intently awaiting the outcome.

"If it's a success, we'll get some flame throwers," the inspector was saying.

The bale came to an abrupt stop as it met the unseen barrier. It rested there, flaming smokily.

"Push again!"

The obstruction had withdrawn and the bale was able to advance a full turn before the next check. The sergeant showed what for him was unusual excitement.

"Bit hot for it," he gloated. "We've got it moving now."

But he was too optimistic. Just as the poles came forward for a further thrust, there came a thud which shook the ground. The flames were snuffed out and nothing but a charred smear remained of the flattened bale. The pole-holders speedily retreated.

"Damned if it hasn't jumped on it," snorted the sergeant indignantly.

The inspector pushed back his cap and scratched his head. His expression, as he gazed towards the *Hurakan,* was one of utter loss. Captain Forbes was no less taken aback, but after a few minutes' thought, he broke into a smile. He stepped closer to the inspector and made a suggestion. The other looked doubtful.

"I'll have to get permission," he demurred. "After all, someone owns the ship."

"They won't mind when they understand the danger. Much better destroy the ship than let this thing grow."

"How long will you take?"

Captain Forbes considered. "Till tomorrow morning."

The inspector nodded. The plan seemed sound. Nevertheless, he glanced uneasily at the line of measuring sticks. The danger area would be close to the trees by the next morning. The captain saw his look, and interpreted it rightly.

"I know you'd like to tackle the thing now, but what can we do?"

Dirk, who had watched the last two attacks on the creature without comment, walked over to them. The inspector's attempts to come to grips with the danger seemed to him childish and highly unscientific. He was reminded of some boys he had once seen poking a sleepy lion with sticks—but there was a difference, for the boys had been able to rely upon the protection of the bars. Now Captain Forbes had succeeded in producing something which was probably another hair-brained scheme.

"Why not get some biologists on the job?" he suggested.

● The captain did not receive the remark kindly. There was no reason that he could see why a terrestrial biologist should be an authority on a form of life imported from the Procyon system—if, indeed, it had come from there. Moreover, he pointed out that you did not call in a biologist when you wanted to destroy even an earthly wild animal. Dirk was curt.

"That's just what you should do. After all, it was the biologists who destroyed the pests in Panama and similar unhealthy spots. For all you know, you may be fooling around right now with a barrel of high explosives. Just suppose the creature had been inflammable—as it might easily have been—you'd have started a fire which would have spread for miles."

"You are not a biologist yourself?" asked the captain coldly.

"I am not."

"Then I'll thank you not to interfere. Further, I will remind you that you have no standing here."

The inspector, less sure of himself, made to interrupt, but changed his mind. He did not feel a great deal of confidence in the captain, but he sympathized with his resentment. Dirk's face went red with anger.

"While you're playing around, this thing is growing. If it gets right out of hand, Lord knows what may happen—and the responsibility for it will be yours."

"That being so, will you please refrain from further comment? Since you seem to have no constructive help to offer, I see no reason for you to remain here."

Dirk checked the retort which occurred to him. He turned on his heel and strode angrily away into the trees.

"Damned meddler," muttered the captain as he watched him go. Turning back to the inspector, he added: "If we are to be ready by tomorrow morning, I'll need to get busy immediately."

CHAPTER IV

Exploding the Invisible Monster

● Dirk did not return to the hotel, nor did he leave any message. David was scarcely surprised, for Dirk was not one of those to take rebuke easily—the less so when it was scarcely merited. In consequence, he made a solitary breakfast the next morning. There was no mention of the *Hurakan* affair in any of the newspapers. He had expected headlines in elephantine type, but repeated search failed to reveal even a paragraph on the subject. It was the more perplexing since the ship had now lain on the hillside three nights and two days. On his way to the scene, he stopped at the police station and picked up the sergeant.

"What's happened to the journalists?" he asked as they started. "This ought to be a Godsend to them."

"It was, but we shut down on them."

"That's a notable achievement—but why?"

"They were going to spread themselves over pages, and there'd have been day trips running by this time and—well, you remember that sensation seeker the other day. He got his, all right." After a pause, he continued: "There are going to be some fireworks today and we want the place clear."

They approached the wreck to find that the danger area had shown greater increase than had been expected. Only a narrow margin of safety of a few yards' breadth now lay between it and the trees. The inspector and Captain Forbes looked up to greet them and then returned to the study of an enlarged photograph. David gave an exclamation of surprise and the captain grinned.

"Good, isn't it? Just been delivered."

"But how on earth—?"

"Bit of brainy work up at the Flying Field. They sent a plane over yesterday and fired off a few feet of film—naturally, there wasn't a sign of the thing when they developed. Then some bright lad had the idea of rigging up an intra-red camera and sent it over. Here's the result."

The print showed the site of the *Hurakan* and the immediate neighborhood. Of the ship herself, little but the upper surface was visible, the rest being submerged in a dark area which extended all about her. At the first glance, this shadow appeared to be a smooth oval, but a closer view revealed that the edge was serrated into a series of blunt projections. David found it disappointing and said so.

"Can't tell much from that," he murmured. "I mean, it still doesn't show us whether we are dealing with a single creature or a mass of the brutes."

"Anyway, I'm certain that it is animal and not vegetable," rejoined the inspector. "—And that's not really so strange when you come to think of it. After all, it's not a very great step from the transparent living things we have on earth, to a creature of complete invisibility. Did you notice that everything that it has snapped up travelled right into the ship? I have an idea that we shall find it to be one individual with multiple throats and a central stomach somewhere in the *Hurakan*. In fact, Cap-

tain Forbes' plan is really built upon that idea."

"What is the plan?"

The inspector explained. It had been calculated that any object snatched by the invisible creature would require—at its present size—just over two minutes to travel into the ship. A number of bombs had been constructed and equipped with timing devices to give a further half minute's grace. They had then been placed in wooden cases to make them palatable to the creature, and he had every hope that the simultaneous explosion of this indigestible meal would settle the matter. It entailed, of course, the annihilation of the ill-fated *Hurakan*, but she could now be of little value.

"Why not detonate the bombs by short waves and make certain that they coincide?" David asked.

The captain shook his head. "That was the first idea, but there's the masking effect of the metal hull to be considered and it's quite likely that the body of the creature may act in some degree as a shield. The timing method seems more certain."

● David stood back and watched the preparations. Forty or fifty men had been assembled, and the captain was instructing them in their duties. The sergeant came to his side and chatted. He seemed to have no great faith in the plan, and concluded with the opinion that they had better look for cover if they did not wish to be blown to pieces themselves. David recalled seeing a disused hut which would be ideal for the purpose, since it stood back in the woods a hundred yards from the main clearing. He led the way around the narrow free space which still remained.

At a convenient spot, they paused to look at the deployment of the captain's troops. At regular intervals, all around the edge of the clearing, men were taking positions facing the ship. At a glance, it seemed impossible that there could be any danger lurking in that sunlit space—it still appeared that one might walk right up to the *Hurakan's* glittering sides and encounter no more obstacle than the empty air. Each of the encircling men held a pole in his right hand, on the end of which was mounted the wood-cased bomb. In his left hand was a string attached to the pin. One or two of them were noticeably nervous, and others seemed to regard the whole affair in the light of a joke. The majority waited phlegmatically for the signal.

At the sound of three sharp whistle blasts, each pole bearer snapped into sudden action. The weapons were tilted horizontally, the left hands tugging smartly at the strings, and the pins fell free. The cordon closed with levelled staves in the manner of old-time pikemen.

They took three paces, and then a sharp crackling ran around the line. The bulbous wooden heads were snapped away to begin their slow journey to the wreck. The men of the cordon sprinted for cover, dropping their shortened poles as they went. For a full half minute, David and the sergeant continued to watch the uncanny progress of the flock of destructive balls, slowly and silently converging. Then, they, too, thought of shelter and made for the hut.

The meager light from two grimy windows enabled David to inspect the place. Such furnishings as had occupied it had long since been removed. Only a few sagging shelves were left; a broken ax-haft and remnants of other tools lay about with a few dribbled paint cans and other rubbish not worth the labor of removal. He sat himself down on a pile of leaves in one corner. The sergeant came and joined him. Their heads bent together over a large, business-like watch of the latter's.

"Still a minute to go."

As if in prompt contradiction, came a muffled double thud, quickly followed by a third. The sergeant shook a disapproving head. Bad workmanship—luckily it didn't matter a great deal in the present circumstances. Increasingly tense, they watched the second hand crawling towards the main burst. It came fifteen seconds before it was due. First a crash, and then, right on top of it, a stunning roar as though the premature explosion of one bomb had fired the rest.

Instinctively, they clapped their hands

over their ears while great waves of sound sent the windows tumbling into fragments. They were battered and swirled around as the aerial breakers surged over them. A patter of scattered debris rained overhead. A violent thud caused the entire structure to tremble. Dislodged dirt rattled down, and closely following it, came the slither of something falling from the sloping roof. It landed with a soggy thump outside the door.

CHAPTER V

"There Must Be Dozens—"

● David grinned. "I'll bet that was a part of the brute," he said with satisfaction. "If it gets over that little meal, it'll—"

He stopped suddenly. Somewhere near at hand had risen a scream of fear; a scream mounting in agony till it stopped with a suggestive suddenness. The two looked at each other in consternation. That scream could only mean one thing—something had gone wrong and the danger was not past. The sergeant opened his mouth to speak, but was silenced by another tearing scream, closer than the first. For some minutes after that, the air rang with anguished cries. David clapped his hands back over his ears to shut out the sounds of torment. He darted a glance at the sergeant, and could see that his face was pale and grimly strained; he was rising in the manner of one who feels that he should act, but does not know what course to take. He stepped towards the door, but David was swifter; he rushed past him and stood barring the way.

"No," he cried. "Give me that stick first."

Wonderingly, the other picked it up and handed it to him. David pulled the door an inch or two ajar and thrust the stick downward through the slit. There was a swift crunch and he withdrew it, appreciably shorter.

"You see?" He pointed to the unmistakable marks of teeth at the end.

The sergeant took it from him, and then he, too, thrust it at the crack—higher up than before. He struck smartly downwards. Two feet from the ground, it hit an obstruction and broke off short in his hand. He looked at David.

"We could easily jump over it," he suggested.

"And land on another one, perhaps." David shook his head and paused for a moment before adding: "Now we're in a hell of a mess. That bomb idea was a complete flop—the danger's been scattered all over the place."

Another cry of pain came from the surrounding trees. A rattle of rapid fire began in the distance. A moment later a section of the door's bottom edge snapped off and began to float away. Hastily, they slammed it shut and slid the bolt.

"We'll have to get out of here pretty soon," muttered the sergeant.

They gazed speculatively out of the shattered windows. The sunlight filtered down through branches to fall on ground which *looked* bare, but . . . . David turned his attention to the cobwebby space overhead. Safety, for a while at least, seemed to lie up there. With the other's help, he grasped a roof truss and swung himself up. The boarding proved to be in very bad condition, so that he was able, by standing on the beam, to kick a hole through the rotting roof. Shortly afterwards, the two men sat side by side on the coping, staring through the deserted wood. There was not a man in sight. Far away to the right they could still hear spasmodic shooting and an occasional cry. David gave a hail, but it brought no answer—there had been too many cries. The firing was slackening now, and he wondered whether the fact indicated escape or defeat.

"I guess we'll have to stay here till somebody turns up," he said at length.

The other did not answer; he was staring in fascination at a patch of open ground. Its whole surface appeared to be in motion. Drifting streams of sticks and chips of wood were oozing to several centers. David looked about hastily, and observed the same seeping movement in a number of places.

● "There must be dozens of them."

The sergeant nodded. "And we're in the middle," he added. "It all comes of this

gallivanting about. I never did think much of it. Stick to your own planet, is what I say; it's large enough. But will they? Not so you would notice it. They go flinging themselves about the sky, and then what happens?" He paused aggrievedly. "First they crash on the moon, and then when they improve their machines, they go falling into the sun. Nobody minded them doing that so much, 'cept that it was expensive. But they're not content with that. No, they have to go and bring back that Venus weed that exuded bad gases, and no sooner have we stamped that out than we've got to face the blue plague from Mars—Lord knows how many millions went down with that—and now they go out of the system altogether and bring back this blasted thing from Procyon—wherever that it. Damn' silly, ain't it?"

In their present predicament, David felt inclined to overlook the wealth and amenities which had accrued from interplanetary commerce and agree with the sergeant.

"If we could only see the thing, we might be able to do something," grumbled the latter.

An idea struck David, and he swung himself back through the hole in the roof. As he searched through the accumulated rubbish, he noticed that a quarter of the door had already gone. An exclamation of satisfaction told the sergeant that he had made a find.

"What is it?"

There was no answer for a while. Finally he said: "Can you see the door from there?"

The sergeant found that by craning over to the limit, this was just possible. David's head and shoulders appeared through the empty window frame alongside the door. His hand held a battered can of red paint which he proceeded to pour out. Instead of reaching the ground, it threw the shape which lay there into visibility. It was a mere miniature, but, even so, it was a far more alarming object than the aerial photograph had suggested.

The main mass of the creature was hemispherical with the flat side resting on the ground. The domed top was bare and smooth to more than halfway down its side, but for the rest of the way it bristled with blunt projections. At the end of each of these was a wide mouth snapping continuously and full of sharp teeth. David concentrated on one of these "heads" and daubed it thoroughly; he noticed that, if necessary, the wide jaws were capable of opening far back like those of a serpent. It made him shudder to think of the size of the original invader of the *Hurakan*—even this little specimen was a long way from being harmless. He was able now to see the way in which the mouths wrenched lumps of wood from the door, bolting them whole in the same way that Toby's leg had been bolted. Repulsive as the creature was, it became less perturbingly uncanny than had been the sight of the objects drifting down its unseen throat. David even felt slightly heartened—one could at least fight a visible enemy. He slopped his paint this way and that to detect the presence of any other. Only one was within his range, and the section which was revealed showed it to be even smaller than the first, but, despite its mere nine-inch diameter, the many mouths snapped no less ferociously. As he leaned yet farther out, a cascade of dirt rattled past his head.

"Hi," called the sergeant's voice in some agitation, "there's one of the darned things up here."

CHAPTER VI

Invisible No Longer

● David scrambled back to the roof, the paint can, which was his only weapon, still in his hand. The sergeant was staring and pointing towards a spot near the center of the coping. Already, the supports had been laid bare, and a piece of wood was rising into the air. His pot was almost empty, but he flung the last few drops at the place. They were enough to reveal two or three pairs of snapping jaws. The creature was not only on the roof with them, but it was gnawing away at the supports. He threw the useless can away and looked around.

Branches thrust themselves against the end wall of the hut. It would be a fair jump

to the tree trunk. He looked at the other doubtfully. The policeman grinned as he saw that look.

"Used to do a bit of jumping in the old days, and I'm still good for that distance," he said.

He led the way to the end, scrambling astride the gable. There was need of hurry, for the whole roof would collapse the moment the creature began seriously on the main tie-beam. He stood there poised on the extreme gable end, steadying himself with a hand on David's shoulder. He launched with a powerful leap well into the branches.

"Good. Now climb up a bit and I'll come over."

He felt his right foot slip as he took off, and heard the sergeant's startled cry. Desperately, he grappled at the branches, only to feel them snap beneath his weight. Something sluggishly yielding broke his fall. Like a flash he hurled himself to one side and rolled. Even as he went, he heard the tearing sound of fragments of his coat ripping away. The sergeant's voice called after him hoarsely.

David sat up, and in that momentary rush of elation which follows a narrow escape, grinned up at him.

"I fell on one of 'em," he announced. "What do you know about that?"

"Fell on it?"

"I did, and it's a lucky thing for me that it hasn't got teeth on top. It was right under the tree, and—"

He stopped suddenly as he noticed that the creature was eating into the tree trunk. It was not big, he judged, for the floating chunks of wood were no larger than lumps of sugar, nevertheless, the tree was slowly but surely being undercut.

The other had started to descend, but he called to him to stop. With a stick dropped by one of the retreating bombers, he thrashed furiously at the invisible feeder. There was no apparent effect; the wood chips continued to flow neither slower nor faster than before. David calmed himself. At the present rate it would be some time before the tree fell—that was, if the food did not cause the animal to grow. With a swift inspiration, he thrust a broken branch into the undercut so that it must be gnawed through before the trunk could be continued. Behind him, the roof of the hut collapsed with a startling crash.

"Not much too soon," he muttered as he watched the rising cloud of dust.

"Look here," objected the sergeant, "I can't stay up here forever."

"Why not? It's the safest place."

● Another smashing thud caused him to jump around. Less than forty feet away, a tall tree had toppled and fallen. It became uncomfortably clear to both of them that this was not a safe place after all. The sergeant's perch was overtopped by trees on all sides, many of them already showing deep cuts. Any one of them falling in his direction would certainly sweep him down. He began to descend hastily.

"Wait a minute. You can't come down the trunk."

Cautiously testing the way before him with his stick, David made for a spot beneath the lowest spreading bough. He thrust all around and ascertained that the ground was indeed as empty as it looked.

"All clear here, you can drop." The sergeant obediently landed beside him. "Now we've got to get clear of this place at once. The best way will be—Good God, what's that?"

There was no need to ask. A crackle of snapping sticks was followed by a swashy thud almost beside them. One of the creatures, caught in the higher branches, had succeeded in eating away its own supports.

They backed away in haste. The sergeant pulled out a handkerchief and mopped his damp brow.

"Like a doggone nightmare," he mumbled, looking nervously around and above. "That was a near thing. I don't get this at all. The inspector said there was only one of the brutes."

"Did he? Well, he was wrong. So was Captain Forbes. Dirk was the only one of us who had any sense—he cleared off. And that's just what we are going to do now, if we can."

They began a slow journey. Every foot of the ground had to be tested with sticks which they waved before them like the feelers of some giant insect. Frequently, they cast anxious glances upwards for fear of another falling creature, or of the trees themselves. An hour and a half of such progress found them more nervy and jumpy than ever. Each had discarded several sticks worn down by constant snapping, and so far, they had encountered no sign of any other survivors. The sergeant paused and wiped his forehead again.

"We must get clear of 'em soon," he said, without a great deal of conviction.

"I think there are less of them now," said David, "but they're bigger. They've been growing hard all the time we've been getting here. Come on."

Five minutes later there came a snap which removed a ten-inch length of David's stick. He recoiled. So large a bite proclaimed it as a monster which should be given a wide berth. They started beating around to one side without any success, and then tried the other. The way ahead proved to be completely blocked by a semi-circle of the snapping invisibles. The only thing left to do was to retrace their steps and detour around the spot. They turned back by common consent and began to trace the path with waving sticks. The sergeant was in the lead, and he knew that they had an almost straight track for some yards. He was the more surprised, therefore, when he encountered an obstacle straight ahead. He grunted and tried either side in vain. The two looked at each other. "We found a way in, so there must be a way out," David said desperately.

If there was, they both failed to find it. The circle about them seemed complete.

"Listen!" said the sergeant.

● For half an hour they had been penned in the diminishing circle, and lusty hails from both had failed to produce any result. Save for the invisible monsters, they might have been alone in the world. Faintly, out of the silence came an unmistakable "Hullo?" Both replied with full lung power.

"Coming," the voice sang back. "Stay where you are."

Any other course being impossible, David replied with instructions to hurry. But it took another fifteen minutes before they saw the owner of the voice cautiously approaching.

He was a small young man with large glasses and he whistled cheerfully. One hand waved a long, metal rod before him; beneath the other arm he clutched a bundle of thin sticks, each tipped with a white knob.

"Hullo. What's wrong with you two?" he asked.

"Surrounded," answered David curtly. The casual air of the newcomer irritated him considerably.

"Uncomfortable," commented the young man. "Never mind. We'll soon have you out of that."

He thrust with his rod until he encountered the snapping barrier. Snatching a stick from his bundle, he held out the knobbed end. Immediately it had been broken off, he held out other little sticks to left and right to suffer the same fate.

"Who are you?" he asked. The sergeant told him.

"They thought you were done for," he said, pointing back over his shoulder. "Most of your lot were."

Curiosity got the better of David's disapproval of the nonchalant young man.

"What are you doing? Poisoning them?"

"No, we haven't found a suitable poison for them yet. Watch."

He pointed to the recently swallowed white knob and they saw that it had turned to a bright blue.

"Methylene blue wrapped in soluble paper," he explained. "Away goes the paper and, presto, visibility. My boss, Cadnam, the biologist, had some hundreds of these pills made up. A man called Dirk Robbins came to him in a fearful state yesterday. Cadnam saw that we'd have to make the brute visible before anything else could be done."

"Good old Dirk," said David.

The other nodded. "He had a bit more sense than the rest of you," he said un-

gracefully. "Unfortunately, by the time we got here, some fool had been playing Fourth of July inside the brute."

The blue stain, growing less intense as it dissolved, rapidly spread throughout the creature. They could see now not only the domed outline which they had expected, but could look right into it as though it were a stained specimen on a slide. It became easy to trace the many throats to their common stomach and also to observe a kind of vascular system. At the root of each of the many "heads," a kind of valve could be seen rythmically contracting and expanding. The young man pointed to one of these organs and shook his head.

"That's what caused most of the trouble," he explained. Neither David nor the sergeant felt in the mood for a lecture. More than four feet of the creature blocked their way to freedom, and visibility had not interfered in the least with its appetite. They said as much.

"Oh, that's all right," said the young man cheerfully. He drew a rapier-like instrument from among his bundle of sticks and set himself to piercing the contractile organs with care and accuracy. As he worked, he continued to explain: "A very interesting arrangement, not unlike a heart—but the thing only needs one heart really, and it's got scores. It's a kind of composite animal, and when it was blown to bits, every part with a pulse like that became a separate individual. It quickly reformed and began to live on its own. When two of them press closely together, they merge again—I expect that that's how you got surrounded. A very primitive form, really. So far as we know at present, the only way of killing them seems to be to put every pulse out of action—as long as there's one left going, it can rebuild itself."

When he had finished off all the heads he could reach from his side, he tossed the spike over to David. After a few minutes work, the erstwhile danger became no more than an inert lump of bluish jelly over which they could climb.

"Thank God for that," said David as they reached the far side in safety. The sergeant grunted and mopped his brow again.

The young man led them back over the way he had come.

"What about the original creature? Was that entirely shattered?" David asked.

"Most of it was, but it's building up again. However, we'll be able to deal with it, now that we can see it. Even I felt it was a bit creepy, at first. Transparency is one thing—invisibility, quite another."

● They came at length to irregular rows of the creatures, already stained. They were still gnawing the trees, but seemed almost harmless when deprived of their armor of invisibility. In the distance was a group of men diligently disposing of the monsters with sharp probes. The young man bade them good-bye.

"Keep straight ahead," he directed, "It's clear there. And it would please me if you would tell Captain Forbes what I think of him, when you see him."

"He's safe?"

"Sure to be. That kind always comes out of it all right."

He was correct. When they reached a group which seemed to be at the center of operations, the captain was amongst it. He seemed to be explaining that the failure of his attack was due to the premature explosion of two of the bombs. Dirk detached himself from the others and greeted them heartily.

"Let's clear out," he said a few minutes later. "The gallant captain now has a theory that it would be quicker to gas the brutes. We'll be safer a few miles away."

And so ended the menace of the Invisible Monsters.

THE END

(Illustration by Saaty)

Just then a yellow form dashed from the passageway. It paused a moment, seemed to shriek without uttering a sound, and then dropped lifeless. Others followed.

THE HEAT DESTROYERS

By CLIFTON BRYAN KRUSE

● Man has not yet risen entirely from the barbarous state of his remote ancestors who lived in caves. War—that is his last remaining link to the primitive animal. The history of every civilization is covered with the ugly splotches of battle. How much longer will this go on? Will there be a war to end war? We believe so. This last war may destroy mankind entirely, but our author is optimistic.

This, like many war stories of the future, is not just a chronicle of line movements but a thrilling narrative which will hold your attention to the last page.

● As Major Drake had told me, the real heroes of the battle of Chang-da were never known to a grateful world. You will remember that it was the final destruction of the Asiatic air base at Chang-da which so dramatically turned the tide in the terrible War of the Twenty-fifth Century and led to the swift crushing of the Russo-Asiatic armies on the three important battlefronts.*

If you know your comparatively modern history, you will at once recall that in 2407 there was established a sort of triumvirate by the dictators, N. Yatze of Greater Japan (which included most of the old China of history) the half-breed Van Ensler who headed that polyglot nation which bordered the Indian Ocean and stretched into Asia Minor, and last, the powerful Ivan Zanoff of the Soviets.

The rumors of unrest and fear at the League Assembly, whose capital was then at London, were soon confirmed. By 2241, the three dictators had welded their bulky empires into a seemingly invincible military union. A year later, Zanoff succeeded in having himself made the military head of the Asiatic forces. Here, indeed, was a threat to the half-united peoples of Europe and America. Frantic diplomats at the League Assembly formed a series of secret committees, seeking to place the armies and navies of the League nations at the complete disposal of President Roberts. Yet the still existing spirit of nationalism, with its horde of petty jealousies, delayed any such move, and two years later, in 2414, Zanoff definitely opened hostilities.

From 2414 to 2434 Zanoff drove his hordes in every direction. The rough land of Scandinavia, and a strip of Germany to the Alps marked all of eastern Europe not in the hands of Zanoff. Italy was a land of ruin; a sort of No-Man's-Land where the desperate armies pitted against each other the strength of their gas, their fighting ships of the air and their men. By that date, Africa had been abandoned by the League, and the Mediterranean coast was a constant chaos of poison gas and belching flames.

The Asiatic forces had succeeded well in the western hemisphere. From the short, decisive battles in the South and Central Americas, the Asiatic army (called the "Changs" by the Americans) moved northward, finally establishing their horrible battle line across the southwestern part of the United States. Near the center of that line was the peak of the offensive, and it was here that the great Chang-da was built.

But that is enough of bare facts. This will enable you to recall your history so that Chang-da is significant to you. The nations of the League were sick with desperation. The seemingly indomitable Changs

*The first in Poland, the second at the Alps, and the third this gigantic Chang-da, a series of forts on the barren wastes of America's Arizona.

were preparing a new offensive, and in the hearts of many was the fear that this civilization (which is our very life) was facing complete extinction.

The Ninety-second American Light Air Corps was at that time temporarily established at a camp near the southern part of Utah. Although fully two hundred miles from Chang-da, this camp was considered as being in the very thick of the fighting. The guns of Chang-da could reach them easily, even beyond, despite the fact that a deep interlacing of trenches stretched before them from a hundred to one hundred and fifty miles.

● That spring, the Ninety-second had received, and among many others, a young lieutenant by the name of Bowen. He came to the corps, just eighteen years of age and with virtually no fighting experience. Captain Rondo, Lieutenant Bowen's immediate superior, felt no particular concern about the youth, for indeed, with this war already twenty years on, the armies were filled with boys.

Lieutenant Bowen saw considerable activity there, since the Ninety-second was on constant patrol duty over the broad area of League trenches before them.

One morning, towards the latter part of July of that year, Lieutenant Bowen dropped his scout plane to his home landing field and tumbled wearily from his seat. He had no sooner touched the ground when Captain Rondo came hurrying towards him. Although the sun had not yet appeared in the sky, Bowen could notice a peculiar haggard grayness on Captain Rondo's face.

"So you got back." Captain Rondo was breathing heavily from running. He was a short, well-built man of forty, and in peace times might be heavy-set.

"Back again, sir," Bowen yawned sleepily. "Nothing much stirring. The Changs are lying low. Gets your nerve worse than a whole night of scrapping."

"I know," Captain Rondo nodded, "and that's part of our trouble now."

"What is it, sir?"

Captain Rondo looked around making sure that no one was near. His voice approached a whisper.

"Special mission, Bowen. Headquarters is planning something new. I think they want to get the jump on these yellow rats before they start up again."

"They're getting ready for some devilment, sir," Bowen agreed. "I've been sensing it the last few trips. Things are too quiet!"

"That's probably it. Now, I've some special orders. I'll need you—and four others, for the job. I'm detailing Lieutenant Shannon to take over your beat tomorrow night. You're to go to your bunk and rest this morning and then report at my quarters at two p.m. And above all, don't let out a word of anything unusual."

"I understand, sir."

"Good, Bowen, now get some rest. You might have a look at old Chang-da itself before long!"

Bowen looked up questioningly at Captain Rondo, but the captain had already turned to leave. One of the mechanics was coming to take charge of his plane. The young aviator walked lazily to his camp.

He could not sleep for some time. Captain Rondo's parting words about taking a look at Chang-da disturbed him. The light scouting planes never flew over the monstrous fortresses—to return. That was the task of the Elton Bombers, and even they seldom succeeded in daring the deadly guns of Chang-da. Bowen tossed about in a restless sleep, sweating and rolling in the heat of a July sun. At one' o'clock, an orderly called him. Bowen dressed and made himself ready to meet Captain Rondo again.

He stepped outside the small dugout which served as his bunk, and stared out across the sun-baked land of barrenness. His eyes turned habitually southward towards Chang-da. The gray-brown earth seemed to meet the glaring sky in a horizon of tranquil lifelessness. The dreadful hush of desperate, fear-stricken men made the place reek with death. Underneath the ground before him, in tunnels and trenches, lurked the white men and the black men who were making their final stand against

the Far East's seemingly unbreakable drive. Lieutenant Bowen glanced at his watch, then walked briskly along the meandering little path which led to Captain Rondo's quarters.

"Lieutenant Bowen reporting, sir."

Captain Rondo nodded and mumbled an unmilitary, "All right, Bowen! Just be seated for a while, please."

"Yes, sir." The young lieutenant quickly observed the deepened lines upon the face of his superior. Captain Rondo was weighted down with worry.

Immediately, other officers, all scouting lieutenants of Bowen's rank, came to report to Captain Rondo. There were Watkins and Masters and Hughes, the record-holding scouts of the Ninety-second, and also Lawter, a huge black whose skill as a scout was a boast of the fighting Ninety-second.

"Listen, men!" As Captain Rondo suddenly broke into the strained silence, every man knew that something big was up. "The Ninety-second has a special mission, a desperate mission—straight from Marshal Swartz."

The five lieutenants straightened up in their chairs to a man. Marshal Swartz, the master mind of the air forces of the western division, was the idol of every officer.

Secret Orders

● Captain Rondo's voice dropped to a whisper. "Within forty-eight hours, the League will make her greatest—and probably her real offensive against the Changs. It is the W. C. N's (War Council of the Nations) plan to move first against Chang-da here in America. Following its destruction, the League armies will probably move against Bulin in Poland and lastly against the Italian-Alpine frontier. Naturally, everything rests with the success of our move against Chang-da."

"Destroy Chang-da! It is a dream," muttered the astounded Lawter.

"No dream, Lawter, but a reality—if the Ninety-second Americans do not fail.

"Now here're our orders. Tonight, a very valuable package must be carried to an appointed spot in the region behind Chang-da. That package, in the hands of certain operatives, will be a deciding factor in the drive. We dare not fail! Three planes are to leave, each bearing an identical package. It will be necessary for at least one to reach the destination. You, Watkins, will fly your plane with Masters. You, Hughes, will fly with Lawter. I will fly the third plane with Bowen."

"But the entire region held by the Changs is protected by the night-glare, and the guns of their heavy-armor ships are in reach of everything, sir." It was Masters speaking. "We'd be like targets in broad daylight."

"We're to fly swiftly and hit the ceiling," Captain Rondo explained. "Furthermore, we have three planes. As soon as we hit their night-glare belt, we will disperse, speed for all we're worth—and pray that one of us gets through."

Ten hours later, the three crack planes of the Ninety-second left the ground of Utah and sailed high. Their black bodies were indistinguishable and the light purring of the "English Silents" made their flight virtually noiseless.

Captain Rondo was piloting the leading ship with Lieutenant Bowen giving the guns a final scrutiny. At their feet lay a long box, nearly half the size of a man, encased in a mass of lead. Each ship carried just such a burden, the contents of which was known to none save Captain Rondo.

"It's twelve-ten, sir," Bowen called out to the captain. "The night-glare is appearing straight ahead."

"Yes, we'll be there in a minute." Captain Rondo's eyes were fixed on the haze before them which looked like the light of breaking day. "Signal to Watkins and Hughes to spread out and move about fifty miles westward before we hit the belt."

The three planes flew silently over the vast battlefield. At a given point, they again turned to the south. Before them stretched a band of light, ten miles deep, as bright as day, and reaching from the fortifications below to a seemingly limitless sky. From this point on, they would be in complete sight of the alert Changs below.

Captain Rondo steadied himself at the controls, and Lieutenant Bowen became one with the guns on the tiny craft.

"They're up!" Lieutenant Bowen gasped.

Huge black forms arose from the ground below. The great steel fighting ships of the Changs, darting like miniature cyclones, hurled, their guns firing constantly.

Captain Rondo made a desperate attempt to fly the plane still higher. The ships of the Changs could come no nearer than a half a mile below them, yet that was almost certain death. The three American planes began to move in irregular courses, as the hurling explosives were thrown dangerously near.

There was no return fire from the Americans, however. The light guns of the scout planes were useless against the heavy armor of the Changs' fighting ships. Against the light aircraft of the enemy, the scouts were at an advantage, and very few Chang lightplanes dared a fight. For this reason, even now, they were pursued only by the great rushing clouds of steel so close below them.

Lieutenant Bowen looked around for the other American planes. Only one was in sight, a tiny speck to the right. It was darting here and there in its desperate attempt to span the night-glare belt safely. It was a grim, nerve-racking business.

Again Lieutenant Bowen looked over toward the other plane. He gasped, and a sickening feeling came over him.

"They got one." He half groaned the words to Captain Rondo.

"See the other?" The captain barked the question as he steadily fought with the controls.

● Then came the merciful night of blackness again. They had flown the dreaded night-glare belt. One American plane had been shot down, Bowen knew. From now on they could fly in comparative safety.

Two hours later, the little plane settled down on a bleak and desolate wasteland of endless rock formations. Captain Rondo checked his position once more with his secret flight orders before they got out of the plane.

Lieutenant Bowen was quaking with nervousness. All about them was a world of blackness. Somehow they had come through the night-glare belt. But to what? Their real adventure was before them. He remembered that Captain Rondo had stressed the importance of their mission, but oddly enough it seemed to him to be no more than a usual night patrolling.

"We won't wait for the other plane," Captain Rondo's voice broke the silence. "The Changs might have got both."

"Probably did." Bowen's voice was listless. "The chances for a ship in the night-glare are usually about one to sixty. Our number saved *us* from the Changs' guns; we can't expect more."

Captain Rondo was tugging at the lead box. Immediately, the junior officer assisted him, and they dragged it out of the plane. Without a word of explanation, Captain Rondo, bearing one end of the box, led the way through the night. They were approaching a huge rock silhouetted against the sky before them. For several minutes they went on in silence.

Suddenly a "hist" sounded to their right. Captain Rondo stopped in his tracks.

"Washington," came the sound of a voice somewhere there in the dark.

"Unconquerable," Captain Rondo answered the challenge.

Immediately a form stood out against the dark background.

"You got through?" The voice of the stranger questioned. Then reverently, "God be praised!"

"Yes, this is Captain Rondo and Lieutenant Bowen. I fear the others—we had three planes—did not succeed."

"Unlikely, Captain Rondo." The stranger came nearer. "You have the—box?"

"Here."

"We'll carry it along to the entrance, then come back for the plane."

The three men worked without speaking further. The lead box was placed at the entrance to a cave. Then the three returned to the plane, dragged it to a small gully,

where it was hidden among the rocks and heavy-leaved bushes.

Then returning to the cave entrance where they had left the box, the three entered the small aperture by crawling on their hands and knees. A few yards beyond, the cave became larger, permitting them to stand upright. The stranger then switched on a small electric lantern.

"Major Anderson," Captain Rondo gasped as he recognized the guide.

He was much shorter than either Captain Rondo or Lieutenant Bowen and was dressed in the conventional uniform of a Chang private soldier. Lieutenant Bowen gasped in amazement, for despite the man's name of "Anderson" he was unmistakably an Oriental, almond-eyed and yellow of skin.

"We'll go to my cavern at once," the man called Anderson said without a trace of accent. "There we shall lay our plans."

They followed the small figure as he moved farther and farther back into the cave. Soon the walls came close together, and frequently it was necessary to crawl, so low was the ceiling. The cave went on and on, gradually twisting and turning downward.

"How far do we go?" Lieutenant Bowen dared to question.

"It is just three miles," It was Major Anderson who answered his question in a voice both low and pleasant.

Three miles along a winding, twisting, hole in the ground. The box grew considerably heavier, and both Captain Rondo and Lieutenant Bowen were soaked in perspiration.

Under the Earth

● Major Anderson's home was a natural grotto. The ceiling was, at places, almost fifty feet high, and the room itself was large enough to hold a good-sized house. In one corner was a wretched couch, an electric stove and stores of foodstuffs. There was a single table near the couch, and it was here that the mysterious lead box was placed.

Without formality, the council of war was begun. Major Anderson was caressing the box on the table and talking earnestly to Captain Rondo.

"Had you not come through with this, our work here would be worthless. Now we have but to start before the Americans' drive tomorrow. Let's see. We have—thirty hours yet."

"Go ahead and outline your plans, Major Anderson," Captain Rondo was speaking. "You know the limit of our knowledge."

"Yes, certainly." Major Anderson surveyed them keenly with his sharp eyes. "In the first place—here, I am no longer Major Ralph Anderson of the Swedish Intelligence Corps, but modest Sing Wu, a soldier of General Kronski; commander of the Asiatic expeditionary forces in America. But not even my own mother would recognize this product of plastic surgery.

"Sing Wu is a good soldier, gentlemen. He knows where the great food deposits of General Kronski's forces are to be found. He knows where the cleverly hidden warerooms are secreted. Sing Wu has known all these for months, gentlemen, and he has dug little tunnels here and there so that he may approach these places at his discretion without risking detection by General Kronski's dull-witted automatons.

"Of course, you know that the League headquarters is constantly tuned to Sing Wu's private broadcast station—somewhere in this very cavern.

"Yet before the plans (which not alone Sing Wu, but the intelligence department of the League Assembly devised) can be successfully carried out, it will be necessary to have a great quantity of—X-Vodum compound."

"Radium," his two listeners gasped.

"Yes, chiefly radium—although with the 'X-heat' unit available. And it's here!" He tapped the lead box on the table. "There is just enough in this box. Headquarters sent all available in America and divided it into the smallest containers possible, so that if just one should reach here, that *one* would be enough."

"Then that is why there were but three planes ordered?" Captain Rondo questioned.

"That is the reason. But we must not

waste time." Sing Wu was placing a map before them on the table.

"The center of the American attack is to be here," and he placed a bony finger on the map. "The area is about ten miles in width, and is the very heart of Chang-da. Look, this marks the signal control room. It is the very intelligence of all those battleships along the line. In fact, this point is the Changs' driving wedge into America. It must be smashed first!

"Now you see, here, three small red stars. They are well back of the front line and seemingly in the heart of the Changs' defense. These are the positions we shall hold during the attack."

Sing Wu's tone now became low. "The radium—this chest contains three compartments—is really a definite part of the latest war invention. It was designed by some German just a few months ago, and if it functions as we hope—"

Sing Wu stopped in the middle of his sentence and stared with opened mouth.

"Spies," he hissed in a terrified undertone.

Rondo and Bowen turned around quickly. Sing Wu was now running to the far end of the cavern.

"It's too late." Sing Wu returned to them. "Between here and my secret entrance in Chang-da is a multitude of natural caverns and tunnels."

"Then it was one of General Kronski's men?" Captain Rondo asked nervously.

"I'm sure of it," Sing Wu replied. "We'll have to work fast. Here, Lieutenant, we must open the box, get the three casks of radium, and rush to our posts.

"You must follow me, silently and quietly." Sing Wu cautioned as they were leaving the cavern. "You have your revolvers?"

"Okay," Captain Rondo assured him. "Go ahead."

Sing Wu must have followed some secret marking of his way through the secret caves. At times, they were in some large hall, again crawling through a long, narrow tunnel. All of the going was in complete darkness. There was not a sound to be heard save the heavy breathing of the three men and the occasional snapping of leather upon hard rock.

● From the cavern which Sing Wu called his home-base, to the point where his trail ended at an obscure tunnel-way in one of Chang-da's forts, was a good ten-hour journey. It was an ordeal of nerves and sickening fear, a steady grind onward and onward through the dark and seemingly endless tunnels and caverns.

"We should rest for a moment," Sing Wu whispered to his companions. "Ahead here about fifty feet I have a hidden doorway into the fort. Before we make our dash, I must give you a few more instructions.

"Each of these radium containers fits into a hidden machine. The connections are simple, and by pulling a single lever, the machine is in contact with its accompanying unit over there behind the American lines. This contact makes a direct line of vibrations outward and in the direction of the other machine—Do you see? From your machine to the accompanying machine in America there are a series of enormous fan-shaped waves of a very intense vibration."

"Are they visible?" Captain Rondo asked.

"No, they are longer than light waves; in fact, they are a group of heat waves; a series of heat waves emanating from two distant points and meeting in a broad line at a point midway between the two machines."

"And we shall have three such sets of heat waves in operation?"

"Exactly," Sing Wu continued. "These three will cover the desired area—and woe to those who are within that belt—you will see! And in spite of stone walls, the waves move undeflected. I believe they use another dimension; however I'm not sure on that point. You must understand that I have received all my instructions by way of my vision-board back there in the cave. The parts of those receiving machines, which I have reconstructed, were flown bit by bit to that spot where you yourselves landed, and needless to say, there was no

scrap of information to be found on any of those planes. You can doubtless appreciate the troubles of—a spy."

"So that's how you've carried on your work here?" Captain Rondo exclaimed.

Sing Wu nodded. "I would have shown you back there in the cavern—but for our own spy."

This brought them back to grim reality. Unless they should succeed in their mission, this new and strange weapon would be no more than a dream. They crawled on until they came to a stone wall.

Sing Wu put his ear to the ground and listened intently. Cautiously, he began to pull back one of the rough stones in the wall before him. A thin gray light broke through upon them. The hole was large enough for one of them to crawl through at a time. Sing Wu led the way, being at all times extremely alert.

"Now follow me. Hurry!" he whispered frantically. He hastened down the long gray passageway as soon as the rock had been replaced. Captain Rondo followed, carrying two radium containers, and Lieutenant Bowen was in the rear with a revolver in each hand.

There came a thundering crash! Sing Wu was seen to stagger. All three men instinctively dropped to the ground. Lieutenant Bowen raised his gun seeking a target in the smoke-filled hall before him.

"Don't fire," It was Sing Wu whispering. "We have to make it. Don't take a chance. Try another dash—we can reach one machine—"

He was up and running into the smoke cloud before him. Captain Rondo and Bowen were close behind. Sing Wu dropped again just as another shot roared above them.

"It's just one Chang," Sing Wu was encouraging them, "but we must make it before he arouses a guard. We're too far underground yet to be bothered by many."

The End of War

● Sing Wu was working frantically at a stone in the wall. He pushed it back and motioned Lieutenant Bowen to enter the cavern beyond.

It was a short passageway to a small room. Captain Rondo guarded the opening in the wall while Sing Wu and Lieutenant Bowen went ahead.

The little electric lantern revealed a tiny closet-like room which was filled with a large instrument resembling a radio-vision board.

"This is your station," Sing Wu spoke as his dextrous fingers placed one of the radium containers within the instrument. "See the lever? Pull it down and it makes that white bulb glow. You are in contact with your sister machine. As long as it glows white, do nothing. But when the red light near it glows, you are to turn this dial —see?—yes. When it reaches a point where all of the tubes in your instrument glow, you are sending out the heat waves. That is all. God be with you!"

● Sing Wu was gone. On the floor where he had been were several splotches of blood. Lieutenant Bowen shivered as he heard the rock being replaced and felt himself so much alone in this strange dungeon.

The white bulb of the instrument before him filled the room with an odd, ghostly light. It was uncomfortably warm, and Bowen loosened his clothes and wiped his perspiring face.

His nerves were strained and jumping. Was that a shot? He listened. Had Sing Wu and Captain Bowen succeeded in forging their way on to the other hidden machines of heat-wave death?

A thousand times, Bowen stared hopefully towards the glowing white bulb. That meant America and friends. It was his single point of contact with civilization. He regarded it hungrily and built up a deep feeling of sentiment for it. He counted the hours and minutes, marking them off impatiently. At the cavern they had thirty hours. The trip through the caves had taken nearly ten and a half hours, so that from the time of Sing Wu's leaving him, there remained but nineteen hours.

Lieutenant Bowen fought his inclination to sleep. It was miserably, drowsily hot. He

pulled off his shirt and worked his arms and legs to keep awake.

The red bulb was glowing!

Lieutenant Bowen's nerves danced crazily. His hand trembled as he reached for the dial and slowly turned it. Before him, in the instrument, were twenty quartz tubes. With each click of the dial, a tube would slowly glow until all twenty were a maze of intense light.

The instrument seemed to hum with a low-pitched sound vibration. The heat in the room was suffocating. Lieutenant Bowen stared with fascination at the marvelous machine before him. What was it doing?

He noticed that connected with each of the twenty quartz bulbs was a twelve-inch disc which seemed to function as a reflector. They faced away from him in the direction of the American lines. There was an odd radiance going out from these discs. It was not precisely a visible band of light, but rather it seemed to be a remarkable condensation of the air. The far wall, too, seemed to be changed. The heavy brown stones seemed to be a liquid substance. In curiosity, Bowen threw a piece of rock at the wall. It clicked sharply and fell to the floor naturally. What was actually taking place in this strange aura of the machine?

Bowen stuck the tip of one finger in the focus of the rays. He drew it back sharply with an exclamation. At first, his finger burned painfully and then slowly became numb. Bowen dug at the injured flesh. It was without life. The nerves and flesh tissues were a crisp mass.

Suddenly, an odd scraping noise chilled the American with fear. It seemed to come from the short passageway which led from his room to the Changs' tunnelway. Some one was disturbing the stone which hid him from the Changs. It was doubtlessly the spy who knew that one of the Americans was hidden somewhere in this locality.

A particularly vicious scrape indicated that the stone had been discovered. Then, for the first time, Lieutenant Bowen heard the thundering explosions of the battle. The roars of distant guns seemed to rock the tiny room.

Lieutenant Bowen became rigid with fear, and he clutched his revolver with whitened fingers. A shrill voice called out a challenge in either Chinese or Russian, Lieutenant Bowen did not know which. He fired at the black hole of the passageway blindly. Then raising his revolver again, he pulled the trigger.

There was no report this time. The gun had jammed. With wild determination to protect his instrument, the American staggered to his feet, clutching his revolver by the barrel.

Just then a yellow form dashed from the passageway. It paused a moment, seemed to shriek without uttering a sound, and then dropped lifeless. Another figure followed the first and also dropped helplessly as soon as it entered the room.

● Lieutenant Bowen laughed with hysterical relief. It was the new machine. He saw it now. As soon as the Changs had entered the room, they crossed one edge of the emanating rays. Instantly, they became filled with the strange heat rays, their every nerve being burned to a charred mass just as his own finger had been burnt.

It was at this point that Lieutenant Bowen probably lost consciousness. He was found, many hours later, by a detail of his comrades from the old Ninety-second. They discovered Bowen in a stupor, lying beside the now lifeless instrument.

Your own knowledge of history will fill in the story. The new weapons of the Americans soon made the stricken area a lifeless chaos. Despite the fact that the mysterious heat waves, moving through any mass, set off all the Changs' explosives, the yellow men themselves never knew about it. The same heat wave instantly burned their bodies, laying low an entire division in a minute's time. Later, the Americans entered the area and struck at the now defenseless left and right wings. It was a complete and striking victory which soon precipitated a mad rout on the part of the remaining Changs.

It was nearly a month later, Major Drake told me, when Lieutenant Bowen was finally brought to a full consciousness

of his surroundings. He and Captain Rondo were held in a secret hospital near Chicago. Of course, the world never knew about it—and were it not for this true story of the Battle of Chang-da, the exact facts would forever be hidden.

But what about Sing Wu, or Major Anderson, I asked Major Drake.

No one knows for sure. He probably was killed by that alert Chang spy before he reached his instrument, or else died of his wound before he could tune in the third instrument.

Major Drake's story so stirred me that I dug around through old records for several days. I was determined to discover the ultimate fates of those two brave soldiers, Captain Rondo and Lieutenant Bowen.

Captain Rondo, I learned, lived a very peaceable life and retired at the age of eighty-five. However, the life story of Lieutenant Bowen amazed me.

He rose rapidly in the Intelligence Division of the League, and before he was forty, was the chairman of the League committee of Union. It was he who was so instrumental in starting the movement which, three hundred years later, carried the world into one great and happily civilized people.

And how did Major Drake know the real story of Chang-da? My search also revealed the fact that Lieutenant Bowen was the great-grandfather of Lady Bowen-Haskell, Major Drake's own mother.

THE END

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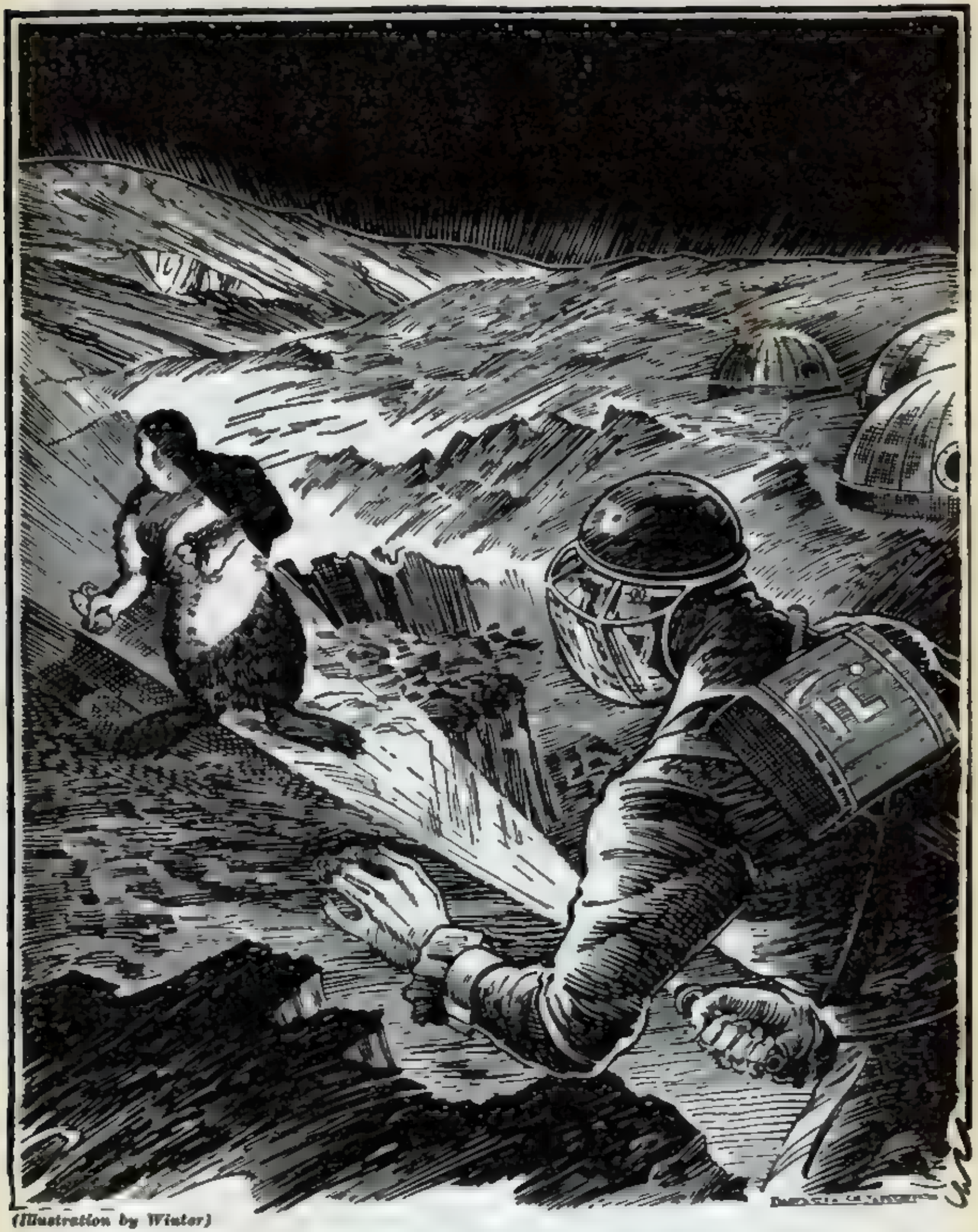

(Illustration by Winter)

A cone of narrow brilliance moved out; moved in a slow, uneven arc, then stopped abruptly as it fastened on a moving creature. It was a fantastic nightmare figure.

THE MOLE-MEN OF MERCURY

By ARTHUR K. BARNES

● Many of our readers have a great liking for stories of adventure on other planets, and they will not be disappointed in this one. In our opinion, this is Mr. Barnes' most successful effort. We are sure you will feel the same. Here is a strong character study—a realistic portrayal of human nature and human emotions. There is no stalwart hero in this tale who can overcome any obstacle by miraculous and unprecedented methods. Not only is the science plausible, but so is the action.

Few budding authors have the ability to present a story of this calibre, and after you finish it, we'll wager that you'll want to see more of his work.

● Time and her capricious Boswell, History, play strange tricks with the record of the centuries. At once rich and barren, tender and merciless, with seeming wantonness, she distorts facts, obscures motives, sucks heroes into her whirlpool of dishonor and oblivion, and spews forth fools and scoundrels to the utmost pinnacles of fame and adulation. Perhaps nowhere will this anomaly be found so true as in the great body of legend that has come down to us in the twenty-third century concerning the epic exploits of the gallant, hardy members of the Interplanetary Legion—wild, romantic tales of danger and courage and superhuman strength and sacrifice and victory in the face of overwhelming odds—tales calculated to appeal to the public imagination, propagated by a clever publicity manager, unhampered by any reliance on fact or probability. And surely not even in this extensive folklore can be found a story more completely conducive to the ironic laughter of the Fates than the incredible case of George Gower and the metal mines of Mercury.

Of the antecedents of young Gower we know little. He was born in Portland, Oregon, and his father was a retired lumberman[1]; so much is a matter of record. Presumably he was passed through the state educational system with nothing discreditable to his record, then took the place in the business world assigned to him. There are no data available, however, on these points, and for twenty-five long years we lose sight of him utterly until Destiny, in her unpredictable way, caused him to be seated upon a park bench in Los Angeles, friendless, dispirited, without funds.

George Gower had the makings of a man. He was well over six feet tall, big-boned, and heavy. To the casual observer, he was a splendid creature, vibrant with health and strength. Only a shrewd scrutiny revealed the weak chin, the loose lips, the wavering glance that never seemed to rest and the tell-tale softness of his body. Gower had both brains and brawn, but he lacked that vital spark which glories in the fight against odds, which drives men on to success in spite of themselves.

Across the street from where he sat, a large poster fronted one of the older buildings of the block. It had once been gayly colored in red and green; now every wind that blew down the canyoned street shredded a few more tatters from its torn surface. Pencils and pocket-electels had scarred and initialed the huge board. Gower could barely decipher the lettering. It read:

1. As late as 2070, trees were still being destroyed for their wood, to be used in the construction of dwellings, the making of paper, etc.

INTERPLANETARY LEGION

Join the Legion and See the Universe

A thousand men and women passed by every hour, as they moved along the lower traffic levels, and glanced at that ragged sign. And a thousand pairs of lips twisted in cynical amusement. Likewise did George Gower's lips, as he stared moodily across the park, twist in ironic laughter. For the Legion had been debunked.

At one time, the Interplanetary Legion had been vested with all the color and romance proper to a dashing military unit that year in and year out fought gallant battles against inhuman monsters and won over insuperable odds in their brave struggle to preserve the integrity of the solar system. Young lads, fired with the enthusiasm to do great deeds, kissed sweethearts good-by and rushed off to the legion to fight their way to fame and fortune. The three years' service required of all who joined was looked upon as a sort of comic opera war, just a background for the real high point—the triumphal home-coming with banners waving and crowds cheering mightily along the main level. But ugly rumors began to drift about. The young lads failed to return to their waiting sweethearts; there were no triumphal home-comings; no banners waved; no crowds cheered. A sweeping investigation was ordered at Geneva by the Supreme Council of the Nations. The pretext—alleged misrepresentation of the conditions of the service—was trivial in the extreme. But the discoveries made by the investigating committee rocked the world.

● When the civilization of the inner planets (Mars, Venus, Earth) began to extend their sphere of influence into the further reaches of the System, in an effort to establish a sort of cosmic empire, they met with incalculable difficulties. The risk of long flights in space, the dangers of gravitations and atmospheres on other planets and their satellites, the hostility of monstrous and malignant forms of life—all these tended to nullify what hard-won advances were made. These inimical life-forms can never be wholly conquered; they can only be held in check. For that purpose, the Interplanetary Legion was conceived as a permanent military unit to guard the frontiers of civilization wherever they existed, dedicated to constant struggle and hardship. Enlistment in the Legion was for a minimum period of three years. Of the thousands of men who had joined, including some of the finest specimens of life from three planets, fully ninety per cent never returned alive. Of the few who did come back, most were twisted and blinded and broken, ghastly human wrecks whose daily prayer was for speedy release from a pain-wracked existence.

Small wonder, then, that the popularity of the Legion was snuffed out in a moment. Small wonder that people glanced with distaste at the neglected posters that had once decorated every major city on three planets. Small wonder that George Gower muttered scornfully, "Not for me."

"That Legion stuff seems to be washed up."

Gower turned, saw a stranger seated beside him. He was neatly but poorly dressed, and one sleeve of the heavy singlet that was the prevailing dress mode was pinned up. Gower grinned at him.

"You're talking, friend. I may be flat, but I'm joining no suicide clubs yet." He stuffed his hands into his pockets and smiled in the complacent fashion of one who thinks he knows when he's well off.

The stranger nodded agreement. "So long as I've a check[1] in my pocket, I'm staying away from that place."

One can only guess as to how the conversation went along, or where it was carried on. But it ended in an automat restaurant, where the one-armed man finally took Gower to treat him to a meal. As they left the place, young Gower sud-

1. Credit check—the unit of exchange in United America at this period of history.

denly took ill. He reeled dizzily, clutched at his companion's arm, carried his hand to his head like a man dazed by a blow. As he peered at the other, he was mildly surprised to see him grinning. Grinning like a smug cat. Grinning . . . . That was George Gower's last conscious recollection for many hours.

From this point forward in our chronicle, we are on firmer ground. From the secret archives of the Legion, available only to a privileged few, from camp records, log-books of Legion space-ships, diaries of some of the men, and from scattered reports, we glean our material for the connected tale. Hence, it is a recorded fact that Gower's first audible remark, when he finally awoke from his drugged sleep, was,

"Well, what the hell?"

He sat up, shaking his head to clear it. He was in a tiny windowless room, furnished barely. There were four cots, a table and chairs. A miniature wash-bowl occupied one corner of the room. Everything seemed to be fastened down. George glanced at his clothing. It consisted of a one-piece suit of rubberized material, dark green in color. Stenciled in red just over the left breast was a monogram: "IL." George was no fool. He knew he was on a Legion ship, kidnaped in the crudest sort of way. He felt rage mounting hotly to his temples.

The murmur of voices caught his attention and he turned in time to see the door swing open. Three men came in, clumping awkwardly with their heavy magnetic shoes, and moved toward the beds. Gower leaped up, then found himself flopping like a fish against the ceiling. Striking out wildly, a lucky push sent him floating down to the floor again. The strangers were laughing at him as he fumbled for the heavy shoes at the bedside. But George was in no mood for humor. A terrible sinking sensation had gripped at his vitals; a numbing fear assailed his cowardly heart. He was in space! A black pall descended upon him like a poison mist, the room whirled, and he experienced a sickening illusion of falling, falling through vast distances, falling faster and faster, falling interminably . . . .

George Gower felt the shock of ice-water on his face. Rough hands were holding him upright. A voice asked:

"All right now?"

George blinked. "Yes . . . . Yes. I'm all right. What happened?"

"Touch of space sickness. You'll have these spells for a week or so, then it'll pass away." The man turned aside indifferently.

George remembered his grievance, and with remembrance came a new accession of rage. He called out:

"Are any of you officers on this crate?"

One of the men raised up from his cot. He was pock-marked and scarred, with thick lips and dark, heavy hair and eyebrows, a typical thug.

"I'm your sergeant," enunciated the thick lips. "It's customary to address your superiors respectfully." He laughed harshly. One of the others passed a coarse remark.

George flushed, then yelled: "I demand to be taken back to earth at once. You can't shanghai[1] me like this. It's illegal. You can't do this and get away with it!"

The third man jerked a thumb at George. "He *demands* to be taken back. Haw, haw!" All three guffawed.

The sergeant stood and toed into his shoes. "Come along," he said. "You can see the captain."

Together the two of them left the tiny cubicle, marched along dark corridors that burrowed through the bowels of the ship, and finally entered another room, larger and more comfortable than the one they had left. George became conscious of a growing murmur that throbbed annoyingly against his eardrums, more felt than heard. Through dozens of thicknesses of exalite and beryllium, from a distance equivalent to several city blocks, George Gower, with a new and terrifying sense of

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1. Ancient sea-faring term, now obsolete, used to describe the kidnaping by force of men to serve on sailing ships of the nineteenth century.

intimacy, was listening to the thunder of the rocket-tubes.

CHAPTER II

Shanghaied Into Space

● The captain was a hard-bitten little Frenchman, wiry and battle-scarred and tough. His tones were brittle as he spoke.

"I am Captain Marchand. What is it you wish?"

Gower drew a deep breath and began to bluster. "Captain Marchand, I have been detained against my will on this ship, kidnaped in defiance of the law of—"

"What is your name?" There was a pitying contempt in the little man's glance.

"George Gower. And unless I am immediately returned—"

The captain raised a hand wearily. "Yes, yes. The authorities will hear from you. The law will be upon me . . . . Now, get this, Mister George Gower. It will be three years before you ever see the earth again, other than as a pin-point of light in the sky. Three long, bitter, heart-breaking, dangerous years. Three sweaty, painful, disease-filled years. Three years of living death. Three years that will either take the putty out of your spine or leave you a frozen corpse somewhere in space . . . . Now get out of here, and remember that if I hear one more word about turning back, you'll be burned down[1] for treason.

Gower was suddenly deflated, aged. "B-but where are you taking me?" he managed to ask. His soft chin trembled.

"Training camp on the moon. Now get out."

The thick-lipped, grinning sergeant dragged George out of the room and down the myriad corridors to his quarters. There was a suspicion of tears in his eyes as he lay down on the bare little cot.

There is no doubt that young Gower shirked his duties as much as possible during the two weeks' intensive training period. The Legion aimed to harden its recruits in the shortest time consistent with thorough instruction. Life on the moon was one continual round of drilling in formation under the huge oxygen bells or "igloos," then skirmish practice in space suits outside, sham battles, life boat drill, and preparation for the hundred and one emergencies that constantly harass the luckless legionnaire. This, of course, was entirely unsuited to George's temperament. He tried once merely to absent himself from drill without excuse. For that offense he received twenty lashes on his bare back. Again, he feigned illness, but the camp doctor pronounced him in good health. For that offense he spent half an hour in the Chamber of Horrors[1], as it was called by the men. They brought him out unconscious, but his screams had been heard all over the bell. After that experience, Gower played a different game. He ingratiated himself with the officers, and was finally appointed orderly to Captain Marchand, thus relieving himself of some of the more arduous duties. Marchand continually kept telling him, "This won't get you out of anything when the fighting begins. It'll be so much the worse for your soft belly." But Gower continued his toadying just the same.

● At the end of two strenuous weeks, a few days of relaxation were allowed the men. This was spent largely in horse-play and rough games, and enabled the men really to become acquainted with one another, something they had been unable to do during the stiff training period. They were an unprepossessing lot, for the most part. The governments of the planets had long recognized the inestimable worth of the Legion, so to help keep the ranks filled, immunity was guaranteed to any criminal who joined the Legion for so long as he served, and the chances were acknowledged good for complete pardon if he lived through the ordeal. Hence, a good seventy per cent of the men were of this class; thieves, racketeers, mur-

1. Although the lethal gas chamber was used almost universally for crimes carrying the death penalty, offenders in the Legion were subject to military law and were stood up before the heat-ray squad.

1. Simple torture chamber, once used to force enemy prisoners to talk, later used in the Legion for "disciplinary measures." This shocking item was one of many revealed by the investigation.

derers, riff-raff from the darkest corners of the universe. Illiterate, uncouth, boisterous, they disgusted and irritated young men like Gower who had been forced into their company via a rap on the head or a pill in their coffee. George came in for a good deal of ragging, some of it good-natured, some of it not. So it was with a sensation of relief that he heard the order come to depart at once.

Gower was in Marchand's office at the time, as befits the dutiful orderly, when the radio man hastened in with a message. The captain read it, frowned, and turned to George.

"We leave here, Gower, in three hours. Summon all commissioned officers here at once. Tell the men to pack. An emergency call from Mercury. The metal mines are in danger."

The metal mines of Mercury! We can guess what thrills went up George's spine when he heard that. For what schoolboy of that time had not read a hundred stories of the incredible adventures that befell the pioneer miners on Mercury? And what youngster had not longed to see for himself the very planet where history and romance had been forged from blood and steel? George hastily summoned the officers, then ran to the barracks and spread the news. In five minutes the entire camp was in an uproar.

George was plied with incessant questionings. The metal mines were in danger from what? Will there be fighting? Did the old man look worried? How the hell are we gonna get ready in three hours? Is it serious? George shook his head, tried to answer as best he could, but he knew no more about it than the others, so eventually the groups dispersed to begin their packing. At the end of the third hour precisely, bugles sounded a general assembly under the main bell. The men gathered quickly and quietly, watched in silence as Captain Marchand mounted the small platform. He disdained the loud-speakers, preferring to speak to his men directly.

"You men know we're leaving shortly," he began in a high ringing voice. "You're all wondering why. We learned long ago that it's useless to try and hide things from the ranks." His thin lips twisted in a little smile. "So I'm going to explain the situation to you."

"The mining machines on Mercury have dug too deep, and have broken into a series of underground caverns on that planet. It seems that there's a race of vertebrate creatures living there beneath the surface, and they've proven actively hostile toward the mining companies. By climbing out right up the sheer walls of the mine shafts they attacked the engineers there and killed a considerable number. A sort of guerilla warfare has been going on for some time, and all work has been abandoned . . . . Now many of you know that the material used in spaceship construction is called exalite.[1] But what most of you probably do not know is that Mercury is the sole source of this metal in the System. Hence, this is a crisis in the progress of interplanetary civilization that cannot be regarded lightly. The very existence of that civilization is threatened."

There were a few catcalls and ironic cries of "Hear, hear!" at Marchand's sonorous speech, but they were quickly drowned in the whole-hearted cheer that arose. The men were eager to go.

The first leg of the journey began comfortably enough for Gower. Discipline on board was only moderately strict, there was no great amount of work to be done, and Gower himself came into a sort of popularity by virtue of his being a sort of go-between from the officers to the men. Often his duties as orderly took him into the navigation room, where the commander of the ship and his picked crew of technical experts labored constantly to keep the ship safely on her course as she annihilated time and space in a powerful rush through the void. George loved to

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1. Exalite, the extremely light and durable metal from Mercury, which has the curious property of partially nullifying the force of gravity. Every school child today is familiar with these facts (though, indeed, scientists have not yet satisfactorily explained them) but they were not common knowledge at the time the above incident took place.

linger, though he knew Marchand would bully him for it, in the little glass-walled room, gazing awe-struck at the vast black panorama of the heavens, freckled with bright diamonds, relieved perhaps by the exhaust of some wandering space-car as it flared its faery tracery across the sky. The scene never failed to move him profoundly.

CHAPTER III

Trouble on Mercury

● The first discordant note in this peaceful trip came when they were eight days out.[1] One of the men in the barrack-rooms came down with space-fever. To this very day, of course, medical science has failed to isolate any micro-organism that may cause this strange malady, and doctors are still vociferous in asserting that it is non-contagious. That is poor consolation, however, to the poor devils cooped up in a ship with a space-fever victim, for invariably, most of the other members of the party fall ill too. Young Gower, on that same day, reported to Marchand that he felt poorly.

"What kind of complaint have you thought up now?" asked the captain. "I hope it's something new. I can forgive you if you're original."

George looked reproachfully at his superior, then said:

"I'm not—just not feeling well, that's all."

Marchand chuckled. "I told you, back in camp. You're soft; you can't stand . . . ." He paused abruptly.

Terrible pains had suddenly shot up Gower's spinal column, an iron band seemed clamped around his head, and all muscular coördination was lost. He screamed aloud, staggered in circles for nearly a full minute, then collapsed in a dead faint. There was no question of malingering this time; Marchand sent for the ship's surgeon at once and carried the boy to bed. In two hours he had vomited everything from his stomach and was running a temperature of 104. He talked deliriously.

The harassed doctor, with three other patients already on his hands, resorted to the safest kind of treatment he knew. Taking blood serum from one of the men who had had the disease before, presumably containing anti-bodies with which to combat it, he injected this into Gower's pain-twisted limbs twice a day. He tried to control the remaining symptoms as best he might. About half the Legionnaires and several of the crew came down with the strange malady. Those who did not, including Captain Marchand, were men who had had it before, and they were weakened by constant demands on their blood by the doctor. It was a sad-looking bunch that finally staggered out on firm ground again as they made port on Venus, half-way point on their flight.

Gower was convalescent during the week's stop-over, but was too weak to be inclined to join the others as they caroused about the rougher end of town (Tunjal—equipped with the finest space-flight facilities of any place in the system at that time) drinking and gambling and wenching as only they knew how. He also remained in ignorance of certain facts which the rest of the men learned from a remnant of a Venusian regiment just returned from Mercury. Facts about the conditions there and how the fighting was going. Facts they were that sent the men back to their ship sobered and silent, with a haunted, horror-stricken look deep in their eyes. Facts that inspired a few attempted desertions, quickly rendered abortive by Marchand. Facts that sent the Legion ship back into space as soon as the men could be rounded up and driven aboard. Gower's first inkling that the stopover had been cut short was the faint roaring of the rocket tubes, the brief straining of the ship as it rose, and the distant whine of the wind as she knifed through the cloud-laden atmosphere and drove full speed ahead for distant Mercury.

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1. Time, until the men were actually landed upon another planet, was always reckoned in Tellurian periods by earth-men, in Martian periods by Martians, etc.

● The exalite mines of Mercury are located in the twilight zone,[2] the only inhabitable portion of the planet. When the Legion ship nosed down to its unobtrusive landing, there was no cheering crowd, no fanfare of trumpets, no photographers or news-caster men to greet it. Just a series of gentle pushes, the slight jar of contact, and the men were ordered out in full space-suit attire.

George was one of the first out. He gazed about with interest. All around him stretched the barren landing field, its metallic surface pitted and scarred by many rocket blasts. To the far distant right, a brilliant white arc of the sun peered over the edge of the horizon, its blasting rays neither distorted nor diminished by the tenuous Mercurian atmosphere. And on the left darkness crept up, a faintly purplish haze which obscured none of the landscape, and which was relieved by a weird reddish glow from a distant volcanic cone that reared its ugly head into the sky. Faint wisps of steam puffed up, to be dissipated at once in the thin air. Quite distinctly, young Gower felt the earth beneath his feet rumble at frequent intervals. Objects seemed curiously at once close and far away—close because of the ease with which even the farthest could be seen, far away because of the utter lack of sound. Even the roar of the still-acting rocket tubes seemed oddly muted.

Gower's revery was broken as someone pushed him roughly aside.

"One side there; y'in a trance?" It was Marchand's clipped tones. "Others to come out besides you."

Gower moved aside, asked: "Where do we go from here?"

The little captain laughed. "A short, tough march ahead of us, softy. Think you can bear up?" He turned to shout some orders at the stragglers still coming out, not waiting for George's reply.

A half hour's march, in which even the heavy magnetic shoes failed to keep the men from soaring awkwardly about at each incautious step, brought them close to the mines. The sun had disappeared, leaving behind a legacy of bitter cold that pierced through the insulated suits and numbed every muscle and nerve. The men cheered hoarsely as they came in sight of the great quartzite oxygen bells that housed the mining engineers and soldiers, looking like so many grotesque and misshapen glass igloos squatting somnolently in the dusk.

As they tramped toward the bell with the monogram of the Legion marked upon it, the men were passed by two Martians carrying a third between them. The thick-lipped sergeant paused a moment to speak to them. Gower heard the question and answer through his earphones, but did not understand the language. As the trio passed on, one sagging with sinister slackness, George spoke to the sergeant.

"What happened to the poor fellow?"

The sergeant looked at him queerly, then said, "He died on sentry duty. Frozen to death, the lucky devil. Never felt a thing."

George's mouth turned suddenly dry, and he jumped violently at Marchand's crackling command:

"Order in the ranks! Keep moving there!"

Moving quickly across the mining company's grounds, the men paused before the Legion bell while the air-lock was being manipulated. Just beyond stood the last of the row of "igloos." A ragged hole had been smashed in the side, and the ground was littered with quartzite fragments and twisted steel girders which had been tossed and mangled like straws under the terrific outrush of air. There were still a few bodies lying about, and a hospital crew worked hard at disposing of them. George spoke to someone near him.

"What in the universe happened there?" He pointed to the wreckage-strewed landscape. "An accident?"

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2. Although Mercury shows but one face to the sun, the eccentricity of orbit gives her an oscillating movement, or libration. There is an area of some hundreds of miles, therefore, which have a sort of day and night. The point where the mines are located is toward one side of the zone. Consequently, the "night" is only some four or five days long, while "day" takes up the remainder of the 88 days of Mercury's revolution about the sun.

The man shrugged. "No accident; they meant it. The mole-men slipped through the outposts with a cutting tool of some sort. None of the men had any idea what was going on 'til she blew open." He shrugged again, eloquently.

CHAPTER IV

The Mole-Men of Mercury

● George's last glimpse before he passed into the air-lock was of the broken bell standing there in the twilight—shattered, empty, forlorn. He shivered, but not from cold.

A warm shower, the business of unpacking and selecting bunks, and a hot meal failed to take young Gower's mind away from brooding over its first close-at-hand experience of the utter ruthlessness of life. His nerves were still jumpy when the call came for sentry duty that night. He was chosen for the second shift.

The men quickly sought their bunks, exhausted by the short but hard march and emotional stress produced by the strange surroundings and shocking sights. Many drugged themselves. One by one the lights in the oxygen bells winked out, leaving only dim night lamps burning high up in the domes. Restlessly, George awaited the call, biting his nails, trying to read the months-old papers that lay around, vainly fiddling with the tele-viso. It was a relief when the three-hour period ended with the pleasant sound of buzzers and the flashing of a red light in the main barrack-room. There came subdued conversation, the quick, sharp rustle of men clambering into space suits, and the rasp of metal shoes passing out through the hissing air-lock. George left the others almost immediately, made his way cautiously to his post. He exchanged salutes with the relieved sentry, then listened with apprehension as the man walked away and vanished into the night.

It was not entirely dark. There was no diffusion, of course, but a dim grayish glow from some sort of phosphorescent activity in the rock near by lightened the blackness. Above him, stars shone with a hard brilliance from the vast cup of silence that engulfed him. All about was the intense cold of interstellar space. George forced himself to walk in effort to keep warm. He found himself at the extreme edge of a lava flow, and paralleled it in his march. The volcano was closer now, and its grumbling seemed to have lessened. The ground no longer trembled and only the faintest glow came from the crater. Gradually Gower's mind ceased to think, and he plodded mechanically back and forth, back and forth—a human robot.

An hour had gone by when Gower first suspected something out of the ordinary. The sensitive earphones in his helmet were attuned, not only to the tiny microphones that each man wore for inter-communication and for the reception of orders, but also to outside noises.[1] They picked up a curious sound from somewhere in front of him, a slithering, sucking sound that popped and whispered like a giant's kiss. George's hair prickled on the nape of his neck, and he quickly unslung his flashlight. A cone of narrow brilliance knifed out, moved in a slow, uneven arc, then stopped abruptly as it fastened on a moving creature. It was a fantastic, nightmare figure. About four feet in height, it was, looking roughly like two eggs set one atop the other—a fat, oblong body covered with reddish hair, and a smaller ovoid head resting on narrow shoulders. The face, which seemed featureless in the uncertain light, twisted and grimaced constantly. Short arms carried a pair of metal instruments shaped much like the ancient miner's hand-lamp. There were scarcely any legs at all, the base of the body consisting of long, mobile flaps of flesh covered with innumerable powerful suction cups.

● In an instant, young Gower whipped out his heat-ray weapon and red. The ray sizzled comfortingly; a red glow joined the white of his torch. The mole-man seemed to fall back, roll around without actually leaving his feet, then bobbed upright again unharmed! George gasped,

1. Sound was received in two ways: through the thin, poorly-conducting air, and through ground vibration.

then began to laugh hysterically. The thing was just like one of those round-bottomed, weighted toys that couldn't be knocked over. He sprayed the thing again, without result. The impact of the rays apparently pushed it around, but in another moment it advanced and raised a stubby arm. George saw nothing but the hard ground, the hideous little mole-man, and the arm pointing at him, but instantly he felt a terrible sense of impending horror. The air about him became alive with unseen menace; his body tingled to an electric shock. Death's wing hovered close.

Something snapped inside George Gower. Whirling, he flung aside his weapon and his light and dashed wildly, recklessly away from that spot, screaming madly at every step. The camp was in an uproar when he reached it. Lights were flashing on everywhere. Scantily dressed men rushed about the igloos, finding weapons, fumbling into space-suits. Voices clamored excitedly, hands seized at George as he ran past. But he did not stop until he had fallen at the feet of Captain Marchand and blubbered out his tale. Tears streamed from his eyes as he stammered:

". . . . and I rayed the thing, Captain. I rayed it twice. An' it kept right on comin'. We can't stop 'em, Captain; no man can stop 'em. They'll kill us all. Let's get outa here now."

He tugged with pathetic and disgusting eagerness at the captain's sleeve, muttering, "Let's go now. Let's get outa here."

Marchand spat in contempt, groaning inwardly as he thought of the splendid traditions of the Legion, traditions built up by scores of fighting men with courage unbounded, to be mocked and destroyed in a second by this parody of a man who whimpered and groveled on the floor. He shook the young man violently, slapped his face.

"Snap out of it!" he yelled. "Where's your viscera? Pull yourself together."

He continued slapping George until the latter controlled himself. Then he said:

"You used your heat-ray, I suppose. I meant to tell you that the 'heaters' won't harm these fellows. They're spawned in the heart of the planet, roasted from birth and weaned in hell-fire. Of course the heaters won't bother 'em. But the cathode-ray will. And that's the weapon you're to use. My fault perhaps that I didn't warn you. But not my fault that you turned yellow and deserted your post!" He toed Gower from the room. "Get to your quarters."

A hastily formed skirmishing party found no trace of the mole-men, so they returned to their beds, and the sentries, minus George, continued patrol. The long night passed. The flaming arc of the sun once again thrust up over the horizon, sending its shafts of blinding, searing heat leveling across the plain. The sound of buzzers made p l e a s a n t cacophony throughout the igloos. Men aroused, stretched, dressed for their first meal in the daylight of Mercury, and prepared to go forth to die.

● Marchand quickly assembled the men in company front and marched them to the edge of the lava flow which marked the outer sentry line. Here he halted them, spoke curtly through his tiny microphone.

"We have a slight advantage, men, in that we can profit by the costly mistakes of the Legionnaires who have been here before us. For instance, before twenty hours have passed, this plain will become absolutely insupportable to human life, even in suits insulated from the sun. Hence, we must push forward at once and accomplish our problem without delay."

He turned, pointed up the long, low slope of jagged and broken lava which led in the general direction of the volcano, which was beginning to puff and fret and steam again.

"The shaft which broke into the mole-men's caverns is very near the crater up there. You can see the shattered framework of the oxygen bell if you look carefully. The mole-men retire voluntarily underground at darkness; they can't stand the cold for long, though apparently they absorb enough heat to enable them to move around a bit outside when the sun

is down. They'll be coming out pretty soon now, and our first task is to work across this 'aa' flow,[1] and bottle 'em up in the mine. Advance as skirmishers!"

It was a herculean task merely to traverse the rough lava. At first the men tried to cover ground by prodigious leaps. Several hard falls and sprained limbs, however, checked the men's enthusiasm for this sport. Finally, one of them fell on one of the needle-like points that thrust upward everywhere and at all angles, impaled his space-suit, and gasped out his life before anyone could reach him. George, who was well to the rear, shuddered violently and adjusted his pace to the demands of safety.

Progress was slow when taken step by step, picked laboriously through a miniature forest of stone. Before half the slope was traversed, their presence had been discovered. The mole-men began to creep from the hole and form an irregular line facing the advancing legionnaires. Quietly and horribly they perched at the top of the hill, red-brown and hairy and menacing with their small lamp-like weapons, a straggling crescent of blasphemous little idols about to pronounce dread judgment upon the toilers below.

"Fire!"

The command crackled in every ear. Weapons were raised in an instant, aimed, and all hell seemed to break loose along the hillside. Though at the disadvantage at being unable to use their heat-ray weapons, the legionnaires were well-trained in the use of the clumsy cathode guns, which required recharging after every bolt. A solid sheet of white-hot, crackling flame burst from the front rank of men and the individual bolts snapped up the hill spitefully, spreading destruction wherever they struck. Several of the mole-men jerked upright, seemed to sag within themselves, then rolled over and out of sight. Encouraged, the men pressed forward more rapidly, hastily re-loading. Suddenly, on the extreme left, someone flung up his arms, screaming shrilly again and again. Many turned to look, then stopped in amazement. The stricken man was twitching and bobbing like a madman in some strange dance, and the hellish laughter of a tormented soul rang out without cessation. Another legionnaire abruptly flung his weapons aside, fell down, and began to jerk and scream. And another, and another, and another. The thin air was surcharged locally with electricity. George drew back in fright as his neighbor whirled round and round in tight circles, presenting a horror-drawn, pain-filled face at every gyration, shouting and laughing with maniac fury.

George cowered back against Captain Marchand. "For God's sake, Captain, what is it? What is happening to them?"

Marchand thrust Gower away. "It's those infernal hand weapons of theirs, of course, you fool. Move around a bit, so you won't make quite a perfect target." The captain's tone implied that he didn't give a damn if George *did* make a good target.

"But what makes them jerk around and —act like that?"

"How the hell do I know?" Marchand snapped. "An electrical discharge of some sort. Probably disrupts the nerve currents —makes a short circuit in the nervous system—blows out their neurological fuses." He laughed harshly, then pushed on. "But never fear; the mole-men can't stand the barrage we're laying across that slope. Look!"

CHAPTER V

"Annihilate the Entire Race——"

● The mole-men were indeed falling back.

Numbers of them lay strewn about the ridge; the remainder were converging on the wreckage of the mine's oxygen bell and disappearing into the earth. Taking courage, George rushed headlong up the slope and reached the top with the rest of the men. It was here that a sudden rally of the mole-men caught him in its vortex. A small party of the chunky, red-haired

1. Lava flow which is jagged and broken by the violent escape of gases at the time of cooling, or by crust breakage due to the flow of viscous lava beneath. The word "aa" is an obsolete geologic term, taken from the language, supposedly, of an extinct Pacific island race known as Hawaiians.

little creatures darted back up the mine shaft and attempted to capture two or three of the legionnaires in the van of the attacking wave. In an ecstasy of fear, George lay about him frenziedly, battering with the butt of his weapon, lashing out with boot and fist, flinging his lighter enemies about astonishingly. Stunned by the proximity of the cathode-ray bolts, sickened by contact with the mole-men, he nevertheless proved a veritable demon when cornered, and with his companions, drove the enemy off their feet and took their weapons away from them.

The scuffle gradually drifted from the mine shaft and up to the very top of the ridge, where the last of the mole-men gave up and fled. George paused to look about, tired and trembling, yet vaguely proud of himself. To one side lay the mine-shaft, littered with bodies and the wreckage of the bell, with the rest of the men arriving as fast as they could in safety. To the other side lay the vast crater of the volcano, a gigantic funnel which twisted steeply downward into the bowels of the earth, paved completely except for the small vent in the center with dark, gleaming, slippery volcanic glass. George stepped out upon it and immediately saw his feet spin about like a novice on skates. He sat down lightly and seized the rough rock on the ridge-top to pull himself back. He grinned. A regular devil's slide; it would be a thrill to go skidding down there.

The volcano was beginning to work itself into a heat now; steam poured out at regular intervals and the ground trembled to earthquake shocks frequently. At the far side, one or two of the mole-men still lingered forlornly, hoping to find a way to get underground again. On a sudden impulse, Gower re-charged his gun and fired at one of them. Luckily, he scored a partial hit and sent the creature flying, head over heels, down the slippery crater side. It was at the very edge of the final drop that he managed to halt his progress. George swore in disappointment as he watched his victim begin the long climb back, aided by his queer suction-cup feet. Quickly, George reloaded, then looked up to see an amazing thing. The little mole-man had stopped and was writhing about in unmistakable agony, pawing at his head. Abruptly he collapsed, slid slowly downward till his head dangled over into the pit—dead.

● It was then that George was smitten by his great idea. For long moments he stood on the lip of the crater, pondering silently, gloating over its cleverness, its magnitude, its—

"Disconnect ground-phones!" Captain Marchand's voice crackled sharply into the helmet. George mechanically obeyed, then turned to see what was going on. The legionnaires had cleared away the mine-shaft, and reserves were bringing up high explosives—deadly little hydroxyl bombs which acted with such devastating effect. Marchand was preparing to seal up the shaft by blowing it to pieces; had the ground-phones not been disconnected, the men would have been permanently deafened by the noise. George watched abstractedly as the blasting crew quietly and efficiently bombed the mine out of existence, felt the ground tremble beneath him from the rending detonations far in the earth below, gazed with vague appreciation at the rocks, dust, smoke plumes, and flames which rushed upward in awesome silence from the hole in pyrotechnic display.

A small outpost was left on the hilltop while the main body of troops went back to the camp. The officers wished to consult on their next move. George noticed that all the "wounded" had been removed somehow. He understood. When back at the oxygen bell, he observed a double row of bodies lying in the shadow far off to one side, rigid and still.

He sought out Marchand immediately after camp was reached.

"What," he asked nervously, "are you going to do now, Captain? Sealing one hole won't stop the mole-men from coming out of another. There's a dozen other mines within a quarter-mile of the volcano, I'm told; they'll soon be coming

through them. We'll have a guerilla warfare on our hands, and we're no match for 'em at that game."

Marchand shrugged irritably. "I hope you're not under the impression that that's news to me. I know all about that, and more. But what are you going to do about it, oh wise man?"

Gower ignored the sarcasm and sidled closer, earnestly. "The only way is to completely annihilate the entire race of mole-men. Wipe them out . . . ."

The captain applauded softly. "And just how does the Oracle propose to do this?" Marchand was prone to be bitter when frustrated or worried.

George flushed at this, but refused to give up. "It can be done, in this way. The caverns all seem to center about the volcano—possibly because of some convenient metallic deposit, or because of its warmth, or perhaps some other reason which doesn't matter—but I know that the mole-men do not live within the volcano itself. The gases that come from it are fatal to them; I saw one not a half-hour ago get too close, and he died almost instantly from the gas." George paused in triumph.

"And so?" Marchand began to see what his despised orderly was driving at, but at first refused to admit to himself that it could be of any real worth. George, on the contrary, was warming to his task.

"And so just this," he answered. "Instead of waiting around for the mole-men to reach the surface again, we'll attack them. By bombing the volcano itself, we can crumble whatever walls stand between it and the caverns and seal over the top. In no time at all the tremendous pressure will send the deadly volcanic gases through every inch of those tunnels, and the menace of the mole-men will be ended forever." George concluded with a flourish intended to be dramatic and telling, but which succeeded only in being melodramatic and cheap.

Marchand looked at Gower oddly, as if to say, "Oh, well, we must get our help where we can find it," and shrugged.

"*Sounds* pretty good," he began grudgingly. Then, being eminently a fair man at heart, he acknowledged freely, "In fact, it's a damn' good idea, Gower. I'll place it before the council immediately. There's no doubt in my mind that it'll be found the plan of greatest possibilities yet presented."

And so it was.

CHAPTER VI

Gower's Plan

● Many hours had passed already since the sun had risen, and even the insulated suits of the legionnaires were beginning to heat up unbearably. Marchand, therefore, ordered the plan to be executed at once, as before long only the most hardened old Mercurian prospector would be able to remain outside more than a few minutes at a time. A blasting crew and sentry were taken up the hill to relieve those still on guard. Then the most expert thrower took one of the hydroxyl bombs and hurled it toward the distant, smoking vent. It fell short. A terrific, soundless explosion rocked the men to their heels, tore a gaping hole in the dark obsidian slide. Another one fell short, by far. Two other men with the finest throwing arms in the Legion tried their skill, and failed. Young George, who was included in the party in deference to the fact that it was his scheme, began to feel suffocated. The sun's glare, reflected from the smooth rock, made his head reel and ache. It was growing warmer every minute.

The bomb-throwing was abandoned. Several cans of explosive were brought up from the mining company's storerooms. Percussion caps were arranged in them so that they would explode with any severe jolt. The first one was sent rolling its merry way down the steep slope, but struck one of the hydroxyl bomb shell holes and blew up prematurely. The second was started farther to one side, and headed straight for the main vent, gaining momentum with each second, until it fairly flew the last few yards, plunged heavily downward, and disappeared. And then an amazing thing happened. Instead

of the expected explosion, the heavy can suddenly shot upward, intact, almost a hundred feet into the air, then fell on the far slope, bursting into a thousand fragments as the powder went off.

Marchand stared dumbfounded, then began to curse bitterly. He turned to Gower.

"Maybe you can tell us what's wrong now."

The men were discussing the phenomena excitedly, a bit fearfully. Gower licked his lips, replied:

"Yes, sir. I think I can. There's a great outrush of gases coming from the mouth of the volcano, invisible from this point. But if you move around so that the crater is between us and the sun, it will easily be seen."

Obediently, the party moved around to see. And sure enough, the distortion of the sun's rays as they passed through the gas proved George's guess correct. But it improved Marchand's temper not at all. His face, seen through the glass-faced helmet, was a dark flame as he raged in quiet fury against the fate that balked him thus. He had counted heavily on Gower's plan. And still the sun beat hotter and hotter.

"All right, men," he snapped out. "Back to camp before we're roasted alive." Then, switching on the long-distance phone, he spoke to headquarters. "Round up a skeleton crew for navigating the big ship. Turn out a surface car."

Wearily, the men trudged down the broken slope. George stood by while they rolled out one of the curious "puddle-hopper" surface cars, rocket-propulsion affairs which, with their weak blasts, covered the ground in long jumps of a quarter-mile at a time. The crew piled in, George among them, and they swooped away toward the ship. In less than an hour, the giant space-ship hovered, vulture-like, over the volcano, slowly drifting near the vent.

"Be sure that pile of junk is lashed tight." It was Marchand speaking. He pointed to a number of cans of explosive tied together with several metal shoes, bits of machinery, and odds and ends, to give it sufficient weight. "This ought to be heavy enough to go down that hole."

● The explosive was placed in the forward bombing rack, ready to be dropped on command. Marchand shouted his readiness to the navigator, and the space-car glided directly over the volcano. In a trice, the floor up-ended sickeningly beneath George's feet, and he was flung down the length of the room to pile up against the rear wall with a dozen others. Pitching violently from side to side, the mighty ship was tossed back like a toy, and dropped almost to the ground before the sweating navigator managed to switch on the under-tubes and send it rearing skyward again. George cracked his head on some metal fixture and remained semi-conscious until they landed again. When he aroused, the ship was motionless once more on the bare landing field. The crew stood about uncomfortably, waiting for the airlock to open, while Marchand, vocabulary exhausted at last, paced to and fro, a caged lion in his terrible, glowering silence . . . .

Hours had passed. The heat outside was terrific. In the dry coolness of the council chamber, eleven officers hung intently on Captain Marchand's clipped sentences. He was saying:

". . . . so it would be madness to try that again. The ship might be irrevocably damaged; men might be needlessly destroyed. There remains but one thing left.

"The Legion ships, of course, are equipped for all sorts of unpredictable emergencies. In our ship there are several space-suits prepared for use on some light-gravity asteroid or satellite where the magnetic shoes may prove impracticable. They are designed to carry small packets of neutronium,[1] heavier than any element. These suits have been broken down, the neutronium extracted and built into a single belt of sufficient length to circle a man's body." An uneasy stir

1. Or neutron: a state of matter in which all molecular activity ceases. The atoms thus contracted in upon themselves—there is no longer any space between electrons and protons—acquire tremendous weight.

passed through the audience. Men's glances turned to meet one another, then slid away to the floor. Marchand continued.

"It will be necessary for one of us—one of the men—to strap the belt about him, fill his space-suit and both hands with hydroxyl bombs, and cast himself into the pit. We have tried to lash the belt firmly to a bomb container, but the chances of its slipping off, allowing the belt to fall and the bombs to be flung back, are too great to risk the only one we have. Someone will have to make the supreme sacrifice."

A deathly silence fell in the chamber, finally broken by someone's sneering comment:

"For the glory of the Legion and the persistence of civilization, eh? Bah!"

Another officer asked quietly, "Didn't this idea come from your orderly, Captain?"

Eleven heads swiveled round; eleven pairs of eyes fastened with grim meaning on George. The young fellow flinched, burst out:

"Don't look at me. I thought it up; I did my share. Let someone else do the rest. Oh, no. Oh, no. Not for me." George waved his hands nervously and wagged a sweat-beaded forehead.

"There is a tradition," began Marchand, then broke off.

Someone bellowed loudly, "You wouldn't demand another to die carrying out a plan you were smart enough to think up and not brave enough to carry out, would you?"

Several of the men crowded around Gower and began to work on his frayed nerves. Young George cowered away from them, refused to be the goat. But with quiet and deadly persistence, the officers tore at the fabric of his self-control, beat down his resistance, persuaded, begged, bullied him. Finally he screamed aloud.

"Stop! Stop! Of course I'll go. I'll have to go. But it isn't fair. I don't want to die. I'm young; I have everything to live for. I don't want to die yet!" He flung himself on a low divan, sobbing.

CHAPTER VII

The Supreme Sacrifice

● The tough little captain stared at Gower's shaking shoulders a bit contemptuously. An uneasy scowl wrinkled his brow.

"We might," he commenced, "find a volunteer . . . . ."

The officer who sneered before now laughed mockingly.

"My dear Marchand. A volunteer to throw himself into the maw of a volcano? As likely that you yourself will volunteer."

Marchand's black eyes were little diamonds, glinting, as they looked steadily at the speaker. "Less likely, considerably. I think the officers of the Legion have acted unlike legionnaires themselves in this matter. I intend to go with Gower. I am volunteering."

They stood outside the air-lock of the oxygen bell, George Gower and Captain Marchand, preparing to make their last march of life. About Gower's waist, outside his space-suit, was fastened the tremendous weight of the neutronium belt. He wore no magnetic shoes. For some time he had been muttering and acting strangely. Marchand carried a container filled to the brim with hydroxyl bombs. The pockets of both men's suits were crammed with the deadly little missiles. A scant half dozen of the hardiest old-timers stood about ready to accompany them on their last journey.

There was no dramatic farewell, no waving of hands. The little group quite simply moved away from the shelter of the bell, struggled up the long lava slope, then paused on the lip of the crater for rest. Marchand spoke shortly to the men.

"I advise you to go on back, though you know better than I how much sun you can take. Nothing you can do here, though. It won't be—pleasant—to watch. So long."

The older men nodded gravely, refused to leave. Marchand grasped Gower, who was acting like a drunken man, by the arm, and stepped onto the glassy slide. In

five seconds their feet were in the air, and they were whizzing downward with breath-taking speed, not to halt until they smashed into one of the ragged holes made by the thrown bombs. By a miracle, none of their live bombs went off. Gower mechanically seized a projection to slow his progress. It broke off in his hand, a sharp, jagged dagger of obsidian; he still clutched it while the two continued their downward journey.

On the very brink of the vent, the two men found a roughened spot on which they could stand. Far to the left, the dead mole-man still dangled over the edge. Gower was in a pitiable state, whimpering and moaning, nerves a-jangle, more than half blinded by the terrible glare of the sun. In his ears was the vast roaring of that Brobdingnagian gas-jet as the volcanic gases rushed outward to oblivion in a never-ending stream. It stifled and dulled the mind; it bludgeoned the senses. George clapped his hands to his head and began to laugh and shout insanely.

Marchand seized and shook him vigorously, but Gower seemed not to feel it. He unfastened the neutronium belt and laid it on the ground beside him, one end draped over the bomb case. Marchand leaned close and yelled:

"Keep it on, you fool. I'll cling to it as we go down. Put it back on!"

Gower laughed again, horribly. "What do you mean 'we?' I'm not going to die yet. It's you who're going to wear the belt. You who're going to jump into the pit! You who're going to die! You, not me. D'ye hear? You, you, YOU!"

● Gower shrieked and began to batter at the glass face of the captain's space-suit like a madman. Marchand flung him aside, stiff-armed the younger man as he tried to rush in. George, relieved of the weight of the belt, used his muscles incautiously and was sent bounding into the air several feet. He floated down slowly, squirming and twisting like a dying fish in his rage. His hand found a heat-ray weapon at his belt. As he struck the ground, he whipped it out and fired. Marchand raised one arm and closed in, conscious of a burning, searing pain that tortured every nerve in his body. His left arm dropped uselessly at his side, but his right hand neatly twisted the beater away and tossed it many feet to one side. Mouth foam-flecked, George went completely berserk, flailing with both hands at the metal helmet that covered his enemy. In spite of the poor leverage, his blows were heavy, and Marchand slipped and fell with George on top. It was only then that the latter discovered that he still held the long sliver of obsidian in his hand. In a flash, he stabbed into the captain's space-suit, then sat back to watch his handiwork. His expression, seen through a mist of steam that poured around the two of them, was that of a cat at a mouse-hole.

Air hissed as it rushed from the suit, and the tiny air-o-stat pumped madly to build back pressure; Marchand's breathing became faster and more labored, and his face turned gradually red and congested. His one good hand fumbled to pinch together the rent in his suit. He managed to partially check the oxygen outflow, but much of it still seeped through. Minutes passed, yet Marchand did not die. It took more than a lack of air to quench the vital spark that flamed in his breast. Laboriously he climbed to his feet and stood looking at Gower. The latter's expression was pop-eyed now, ludicrous. Suddenly he screamed out:

"Fall! Fall, you fool! You're a dead man and you don't know it! Why don't you fall? Why don't you die?"

He lunged at Marchand again, striking furiously with his crude dagger, trying to slip through Marchand's weakening guard, beating the smaller man down by main brute force. The little Frenchman, with nothing but annihilation staring at him from Gower's fear-crazed eyes, resorted to a trick he had found useful in rough-and-tumble fighting long before young George had been weaned. He pretended to lose balance, grasped one of Gower's arms, and caused himself to fall backward underneath the other's body. Gower took the bait and piled on. Instant-

(Continued on page 532)

(Illustration by Paul)

For several seconds whoever had issued from the space-craft was hidden from sight; then Lawson saw a lone gorilla bound up the stone steps.

THE LUNAR CONSUL

By SIDNEY PATZER

PART TWO: Conclusion

What Has Gone Before

● In early January of 1947, there appears an inscription on the northern hemisphere of the moon: FEB-1-1947. These letters are thought to have been disintegrated into the pumice, and each figure is many miles in length and height. Although some people take it to be part of an advertising campaign, the majority believe it is some kind of a warning and so it was, for on Feb. 1, 1947, all the gold in the world is turned to lead by some invisible, penetrating ray. This causes a world financial panic, and the value of silver soars to unprecedented heights.

Suddenly, one night, a voice is heard over every radio in the world, drowning out every station. The voice calls himself the "Lunar Consul" and says that he will gain complete control of the world "for the good of Mankind." One of his plans is the wiping out of all "slum" districts in the world, in order that only people "fit to live" may exist.

Lawson, a young detective, has a hunch that the Lunar Consul has his headquarters in the Luna Mountains in Africa, and goes there to investigate with Madeleine Henderson, the daughter of one of the world's greatest scientists who had disappeared along with several others, believed to have been kidnapped by the Lunar Consul, and Kortner, a friend of Lawson's.

They finally locate the headquarters in a clearing, but when they try to approach the buildings, they are suddenly halted by an invisible force-wall. They gain access, however, when the force-wall is lifted for a moment in order to permit the departure of a strange aircraft.

Here they find the missing scientists, who are to fit into the plan of world dominion formulated by the Lunar Consul, who has the power of making himself invisible, and has never yet shown himself. He communicates through the use of mechanical robots.

Military forces attack the force-wall without results, and the Lunar Consul prepares to destroy them. *Now Go On with the Story.*

● **Here we present the conclusion of this baffling mystery tale. If you have any suspicions as to the identity of the Lunar Consul that you have gathered from reading the first half of this novel, you will probably change your opinion more than once before you learn who he really is, as the suspicion falls in turn on practically every character in the story (as it does in all good mysteries). And then, there is the chance that the Lunar Consul is a brand new character.**

Think, for a moment, how potent a force invisibility would be in the hands of a mono-maniac. But the Consul is not the only clever one in the story—

CHAPTER XI

Seeking the Traitor

● By the end of the week, Lawson was paying no more attention to the Foreign Legion sentries, placed at intervals, than he would have paid to a herd of cows. In his daily walk to the "window," he noticed them, but because he could not enter into communication with them, they scarcely noticed his comings and goings, and he acted as if they did not exist. It came to him, therefore, as a shock when the Consul announced, through his golden robot, that he had finally decided on their extermination. "This alien soldiery must not be allowed the privilege of such close contact with our work," the robot said, in his metallically enunciated phraseology. "I will give their officers one warning, and if they do not withdraw within twenty-four hours, I will proceed to destroy them. For the good of Mankind."

How the warning was delivered, Lawson did not know, but the next morning he saw that all soldiers were equipped with gas masks, and that they seemed restive and nervous. He approached one, who at the same time approached him

from the other side of the barrier, and used the expressive French sign-language of tapping his wrist. The soldier shook his head, then called out, and Lawson recognized Lieutenant Scholz coming up expectantly.

"Are you going to run?" Lawson asked, in pantomime.

The lieutenant smiled and gestured, "We remain."

Lawson vigorously shook his head, repeated his sign for running away, and the lieutenant smiled again. Lawson wrote on a sheet of paper, in French: "Flee. You will only be killed," but Lieutenant Scholz, now laughing, made a grimace of contempt, and, still smiling, slipped on his gas mask, from behind which his bulging eyes twinkled.

Lawson almost cried out. Before Scholz could remove his mask a rain like a fine dew fell over him and his men, who staggered and fell prone in ridiculous heaps. Lawson saw terror and surprise in Scholz's eyes: then he too fell to the ground motionless.

Lawson glanced about: there was no one left standing of all the men who had been facing the barrier, except one, who had leaned, some way, against the force-wall, so that he did not fall. He gazed in horror. Had the Consul killed all these? If so, how many. How far back had the gas extended? He looked at Scholz, who seemed to have moved, but detected no further motion, then started walking around the camp. The Consul had carried through this minor threat with almost unbelievable cold-bloodedness. Lawson could hardly believe that there had been a warning given. The Consul would probably consider it a salutary lesson; one more thing to cause the world to pause and wonder at his might.

Lawson clenched his fists, and swore, then and there, that unless death overcame him first, he would live to pry loose the Consul's growing hold upon the world.

"For the good of M a n k i n d!" he snorted contemptuously. The Consul's good, evidently, was strongly predicated on a slaughter of the innocent.

Striding in the rocky land to the south of Nézan's observatory, Lawson saw many uniformed figures lying outside the force-wall; lying stiff on the ground, as if frozen. He muttered to himself in dismay. "That means ten thousand dead, your Omnipotence." He repeated Hammersmith's words aloud, savagely. Ten thousand dead in Paris had seemed far away, unreal, but the death now outside was close and ugly. "A mere ten thousand. A mere ten million." Lawson was working himself into a towering rage, when, unexpectedly, he saw Hammersmith appear from behind a large boulder.

"I say," Hammersmith greeted, "Have you seen any of my pets today?"

"What?" Lawson said angrily. "Pets? Is one of your gorillas loose?"

"I can't find one of them," Hammersmith said half-petulantly. "In fact, one of them has been missing for some time. I usually don't worry about that. There are three, you know, and they often go into hiding in one of the laboratories, but now I can find only two. The one I call George is gone; haven't seen him in many a day."

"Oh, you haven't, eh?" Lawson said scornfully. "I don't suppose you've even noticed what's happened to the Foreign Legion outside."

"Foreign Legion?" Hammersmith said blankly. "My dear chap, after all, this is war.

"And further," he said, after a moment, "it doesn't matter much that one of the gorillas is gone. But where is he? That's what's worrying me. There could be no place for him to go, except outside, and I've looked everywhere inside. I thought he might be hiding here among the pebbles: a bit of sport with the old man, y'know."

"Where were you when the Consul killed all those men?"

"I don't really know," Hammersmith replied indifferently. "Back there somewhere, I suppose, looking for George. What worries me is where in the world he could have gone."

"I imagine," Lawson said, sarcastically.

Hammersmith looked at him closely for a few seconds.

"Well," he said. "Heigho!" Lawson watched him go, and heard him utter little chirping sounds from time to time.

"Numbskull!" Lawson muttered under his breath. Hammersmith and his gorillas!

But he stopped a moment to reconsider. Where *had* Hammersmith been during the gas attack's inception? What had been the truth of Hammersmith's story of the lost gorilla? He, Lawson, had never seen more than two of them.

Lawson noticed Madeleine some distance away, a mile within the force-wall: he waved to her, and she changed her course to meet him.

● He had had no intention of mentioning the massacre to her, and was therefore a trifle surprised when the girl herself brought the matter up.

"Something's wrong," she said, as they came close to each other. "Did you hear?"

"There's always been something wrong," Lawson said. "What is it this time?"

"Something's wrong with the Consul, I mean," Madeleine said. "You were out, I guess, so you didn't hear."

"No. What was it?"

"Well, you know that he had promised to kill the soldiers outside."

"He kept his promise," Lawson said grimly.

"That's just it," the girl said. "He didn't. They're not dead."

"What!"

"Paralyzed. The Consul said—"

"I saw them fall," Lawson interrupted.

"Yes," the girl replied. "Maybe so. But I just saw my father, and he was very much upset. The robots repeated the same message everywhere, something about a traitor in our midst."

"Thank God for the traitor, then," Lawson said fervently. "How was it done?"

"About five minutes after the announcement, I met my father coming out of his room. It's the first time I've seen him in the morning since I've been here."

"What was he after?" Lawson said. "What was the announcement. Do you remember?"

"He said he came to get some cigarettes," the girl replied. "But he seemed very nervous. He asked me if I had heard the Consul's message. I had heard the message, but hadn't understood it, and asked my father what it meant. He said, 'The gas wasn't lethal, my dear. We can thank somebody for that. Someone made an error and injected the steam into Vane's paralyzing solution. It will pass off soon, and they will be none the worse for it. Abominable.' Then he went back to the laboratory, shaking his head."

"That's great," Lawson exclaimed. "That's fine. A traitor, eh? I'm glad somebody had spunk enough to turn traitor."

"He'll die," Madeleine said, with a shudder. "Whoever he is. The robot said, 'There is a traitor in our midst. He shall die. I can not tolerate any miscarriage, however slight, in my plans for world betterment.'"

"That leaves you out, anyway," Lawson said. "But who could it have been? Have you any idea?"

"It might have been anybody," the girl declared. "Alekhine and Berglied were working together on the thing, but Guglielmo and Vane happened to be in on this especial project."

"And others might have gone through the laboratory at any time."

"Yes."

Lawson thought a moment, looked abstractedly at the sprawling heaps of soldiers. Not dead, eh?

"Well," he said finally. "We have a friend. But he wouldn't dare give himself away, even to us. He may think everyone is his enemy, as we think everyone is our enemy. By the way, do you happen to know when he might have switched the solutions about?"

"No," the girl said. "It might have been any time in the last two or three days, my father said. But everything is so dangerous that someone familiar with it must have done it."

"I pity him; I really do," Lawson said.

"He might be able to keep his identity from us, but not from the Consul."

"He can read thoughts?"

"He read mine," Lawson declared positively. He told the girl the story of his first and only interview with the invisible being, when, on the verge of asking what lesson he had taught him, the Consul answered the question before he had had time to speak.

"Well," Madeleine said slowly, "that has taught me something." She hesitated a moment, and, as Lawson opened his mouth to speak, she went on, "You were going to ask me what it was? That's just it. Nothing, except that I, too, can read your thoughts." She smiled at him maliciously.

"Good Lord!" Lawson said. "You mean to suggest—"

"Yes," the girl said triumphantly. "I do. Not that the Consul *may* not be able to read one's thoughts, at such close range, but what you've told me could have happened just as easily with any human. It was no great trick."

Lawson scratched his chin.

"Lord!" he said. "We'll have to test it out, some way. If we find that the Consul actually can't read our thoughts, we're considerably safer than I had thought."

Madeleine looked at him seriously.

"It *is* being tested out," she said.

Lawson showed his incomprehension for a moment, then nodded.

"Yes," he agreed. "If the Consul finds the traitor, it will be a pretty fair test of his ability along that line."

Lawson both hoped and feared at the noonday meal and at dinner that the "traitor" would give himself away by his demeanor, but, when he retired that night, he was relieved, and a bit puzzled. He admitted to himself that he had no clue to the culprit, no inkling concerning his identity. He was relieved that no one had been missing from the table, and, at the same time, puzzled by the fact that the Consul had not already wreaked his vengeance. He was beginning to learn that, once ready, the Consul did not hesitate to spill blood. What caused the delay, unless the Consul did not have all the powers he had attributed to himself?

At dinner he had noticed more constraint and more politeness than usual, but that was all. Every person seemed to control himself with more effort. The scientists were quieter, but Lawson had not seen any cowering and fearful figure. He saw alarm, it is true, but on nearly every face.

Vane, seemingly, went out of his way to be pleasant to Guglielmo. Hermann looked worried, too, but not for himself, as his eyes roved anxiously over his friends' faces. He fairly exuded a premature sorrow for whoever was to die, and Schulte was cheerfully trying to relieve the German's mind of his vicarious anxiety.

Berglied was his usual quiet, reserved self; Hammersmith, although less open and carefree than formerly, showed not so much fear as uncertainty; Guglielmo was surprisingly placid, although he spoke only at intervals as Vane addressed him. Henderson, however, was perplexed, slightly bewildered, and Alekhine appeared to be dubious about something, while Manning was his usual absent-minded self, taking no interest in the dilemma. Kortner, Lawson was certain, had done nothing to antagonize the Consul. One man, among these nine, was concealing something: one man's life depended on his hiding his real thoughts, his real fears.

Whoever he was, he was too cautious to be trapped easily. Whoever he was, Lawson thought, he had courage and the ability to swim confidently in a sea of doubt.

* * *

● A month passed and there had been no death at headquarters. Some of the scientists had missed meals; Vane, Manning and Hammersmith especially often, but there was no seat in the dining room that was always vacant: each place had a claimant. Who had called the Consul's bluff? Was that Invisible Entity unable to read the thoughts of his enslaved subordinates, or was he biding his time to

strike? Did he perhaps relish the mental anguish of whosoever had had the temerity temporarily to thwart him?

The world outside was in ferment, Lawson leaned over his television set. Announcements that meant little to him came over, forced changes in the internal governments of nations, reforms advocated by the Consul of Luna, Atlas. A 28-day month was to be inaugurated in every civilized country, to start with the first day of spring, and the new first month was to be called Luna.

The Congress of the United States, under pressure, had repealed the Asiatic Exclusion act, and a million Chinese had left their war-torn country to settle in California (Vane told Lawson that the White House, at a time when, luckily, President La Follette was out speech-making, had been destroyed by the golden air-cruiser). The Union of South Africa and the Dominion of Canada had diplomatically severed their connection with the British Empire, according to the precepts of the Empire conference in Ottawa some twenty years before, claiming that the abdication of the King had removed their last legal tie with the home-country.

India was given complete autonomy. West Prussia was joined to Germany through the abolition of the Polish corridor, and the Austro-German customs union was put into effect, followed shortly by a European customs union. Bessarabia was returned to Russia. Japan was forced to return the Yangtze river provinces to China, as well as Manchuria and Formosa. Korea was freed. The Soviet Union withdrew from Inner Mongolia. The Philippine Islands were granted independence, and the United States also returned Lower California to Mexico, from whom she had taken it during the so-called "Two Nights' War" to keep the Japanese from occupying a naval base on Magdalena Bay.

The Central American states, including American Nicaragua, were banded into a centralized federation under Argentine auspices. The Chaco Boreal was given to Paraguay, despite Bolivian protest. American marines were withdrawn from China, Haiti, Santo Domingo, British Honduras and French Guiana, and Guadeloupe, Martinique, St. Pierre and Miquelon were turned back to the French republic after their seizure by the United States for non-payment of war debts.

Alsace was given back to Germany, but Lorraine remained French. The Tyrol, including the Brenda pass, was returned to Austria. Italy gave up her Jugoslav naval base at Zara. Germany received her lost African colonies, except for the Belgian mandate of southwest Africa. Liberia was annexed by the United States with the consent and approval of Great Britain. The British naval base at Singapore was utterly destroyed. Argentina laid claims to, and received, the Falkland islands. Lawson was sure that, if he ever returned to the outside, he would need some night-school lessons in geography. A map, these days, was far from permanent.

Human nature was not so easily changed as were political boundaries: there was a French revolt in Alsace, and English massacres in India, and sheep herders on the Falkland islands refused to let the crew of an Argentine gunboat land. Along the Pacific coast of North America there were angry mutterings: Californians instituted Chinese pogroms, and many Chinese, who had been American citizens, were murdered before the state was put under martial law, and even then members of the yellow race were unsafe. A parade of celebrating Filipinos in Seattle was mowed down by machine-gun fire. The New York Stock Exchange was closed until further notice. Even the uproar of the various stricken areas become contagious, and the Red armies, looking for snipers, marched into Lithuania.

Lawson had had many half-hearted arguments with Kortner, winning them only in his own mind, and he had taken daily walks with Madeleine, but he felt slight hope that his mission was going to turn out successfully. Ahmed had returned with no news of any importance, and Lawson was beginning to believe that he had chosen an impossible task.

Nearly every day, "for the good of Mankind," the Consul's air-cruiser had gone off, destination unknown, but Lawson was never taken along. Sometimes other men were included, and Vane went every time. Hammersmith had taken several trips, and Alekhine had been up to make observations, as well as Manning, who wanted more complete proof for an experiment in the refraction of light. Lawson strolled about, ate, slept, and felt humble. The solution was far away, he thought.

CHAPTER XII

Pursuing the Consul

Then one day, like a bright light in the darkness, an idea came to him. Often he had noticed the door to the Consul's room swing open, disclosing nothing, and then swing shut. Always, when that happened and he was in the corridor, he experienced what Hermann had called the "minute of silence": there was a soundless curtain rung down over his ears, and he heard nothing. He had supposed that the Consul was only leaving his quarters to check up visually on the work being done. And then one clue came to him that had been elusive. For, if the Consul were intangible, a mere wraith with a mind above and beyond anything known to man, why was it that he was forced to have doors opened for him? If the dense silence had not always come with the opening of the moon-decorated door, Lawson might have thought that the Consul was indulging in more hocus-pocus.

"Look here, Madeleine," he said eagerly to the girl, whom he had met coming out of the observatory. "Have you ever seen the Consul's door open and *heard* anything come out?"

"Of course not," she said. "There's always the silence that comes with him."

He explained his newly born theory to her.

"Don't you think that proves," he said, "that the Consul, after all, has a body? that he is no incorporeal presence?"

"Well," the girl said. "I've always thought so."

"He doesn't want to be heard," Lawson said. "Therefore he must make sounds as he moves, if we could hear him. He doesn't want to be seen; therefore he has arranged some way of keeping invisible. He advertises his presence, and at the same time conceals his movements, by his 'minute of silence.' And doors therefore must open to let him through. He may be a monster, and he is invisible to our eyes, but he has a body. I don't see any further doubt of that."

As they approached their usual destination for their walks, the barrier to the south that held them back from the pass into the Sahara, they were drenched in a sudden March shower. They laughed. They knew, in that latitude, that the Arabs made it a practice to hang out their washing to dry even when it rained, aware that the sun would dry out clothes almost before the rain ceased.

It was then, in the midst of their silly laughter at the unexpected rain, that Lawson first saw the apparition. It was about two hundred yards away from them, and appeared to be, as Lawson himself described it, *the bubble of a man*. It was, somehow, as if a person covered with moisture were able to withdraw himself, and to leave the moisture thereafter suspended in midair, while the person remained unseen.

"Look at that, in the name of God!" Lawson cried, grabbing Madeleine by the arm, and pointing.

The girl turned in alarm, the laughter on her lips contrasting oddly with the seriousness of her eyes. She looked, but before she was able to focus her attention on the apparition, the sun broke out from behind a white cloud, and she saw only a rainbow flash of color.

"What?" she said. "What was it?"

Lawson blinked his eyes, and continued to stare, but he saw nothing. The apparition had disappeared in the sunlight as completely as if it had never existed. As a man's shadow disappears under a cloudy sky, so the specter he had seen was gone from the daylight.

"Spooks!" Lawson said. "Didn't you see?"

At the girl's negative, Lawson tried to describe what he had witnessed. Like a spook it was, he said, a soap-bubble with the shape and size of a man, although there were only head and shoulders and torso, no legs. The head and shoulders were raised to the height they perhaps normally would have had, provided there were legs underneath to sustain them. And the head was the strangest of all. It began like a head—although Lawson himself was in doubt whether he had seen any features—but where, on the human head, there is the forehead, Lawson described a great bulge, much as if a box had been grafted to it. It had appeared so suddenly in the rain, and disappeared so suddenly, that Lawson had seen nothing else, if, indeed, there was more to be seen.

"What I saw was like a film *over* something," Lawson said. "That is, there should have been something under the film, but there wasn't."

"Where was it?" the girl asked, excitedly. "How far away?"

"Well," Lawson said. "That's hard to say. Maybe a couple of hundred yards."

"Where?" she asked again.

"Over there." He gestured toward the group of buildings.

"Come on!" she said. "Run! Maybe we can catch him."

Lawson, feeling more foolish than he had felt in a long time, ran in the direction he had seen the bubble, ran until, with the abruptness of a thunderclap, the minute of silence closed in over him.

He stopped at once, spoke to the girl, who did not hear him. In mid-sentence, however, his words became audible.

"The Consul!" he said. "It must be!"

"He's moving away again!" Madeleine said. "Or we wouldn't be able to talk."

"Well . . . ." Lawson did not budge. "This is no place to put our heads inside a noose. We can't find him if we can't see him." He hesitated. "I must admit that I don't understand it. How did it happen that we were able to see him?" They looked at each other.

"Why, that is quite obvious, I think," the girl answered. "You didn't see him. What you saw was the rain that had fallen over him and had clung to him or his clothing."

"But why should he run?" Lawson wondered.

For several minutes they mulled the question over. As usual, they reached no decision.

"That *is* a question," Madeleine said. "If he could actually force his ideas on other people's minds, he could have made us think that he was somewhere else, or that he were unapproachable, and we would have believed him. He might have made us think he was over there by the houses—"

Her gaze followed her gesture.

"Why," she said. "He is! He is!"

● Lawson looked toward the houses and saw what appeared to be a man running into the opening between two of Nézan's buildings: the distance (over two miles) was much too far to make out anything except what seemed to be a small, black box projecting from the running man's bobbing head. In an instant he was lost to sight behind the squat houses.

This time it was Lawson who made the call to action.

"Come on!" he said. "We'll find out who it was."

But they did not find out who it was. During the twenty minutes their hurried walk took them to cover the ground to the outbuildings, they did not hazard any guess. They were met at the observatory by a dishevelled-looking Professor Henderson.

"Hello," he said. "Who were you chasing out there?"

"Did you see anybody?" Lawson asked.

Henderson looked at him oddly.

"Of course I did," he said. "Who was it?"

"Couldn't you tell, daddy?" his daughter asked.

Henderson looked displeased.

"Why, no," he said, a trifle angrily. "My

eyes aren't what they used to be, you know."

"We don't know who it was," Lawson said.

The professor looked at him closely, and Lawson in turn noted that although Henderson was not out of breath, his shoes were spattered with mud. He, as others of the scientists, wore light-colored clothing. Of course, it had been raining.

"You don't know who it was you were running after?" Henderson said slowly.

"No," Lawson replied. "Except that it was the Consul."

"The Consul!" A spasm crossed Henderson's face, and he stepped back. "How do you know?"

"Because we couldn't see him."

"*I* saw somebody," Henderson said. "But it was too far away for me to tell who it was."

"Couldn't you guess?" Lawson asked. "Wasn't there something familiar about his appearance?"

"My eyes aren't what they used to be," he repeated. "No. No, I can't say that I did. Wait, though." He passed his hand over his eyes. "No," he said hesitantly. "No, I have no idea."

"But, daddy," Madeleine objected. "How could y o u see him when we couldn't? And we were so much closer."

"I saw him," Henderson said doggedly. He ran his hand again over his eyes.

"I understand that," Lawson said. "It's like the 'minute of silence.' Up close we can't see, or hear. At a distance, there's no effect."

"Yes," Henderson said, relief in his tone. "That must be it."

At this point, Vane came from the door of the observatory, and his usual mocking smile jumped to his lips.

"Ah," he said, with what Lawson took to be an unnecessary sardonic inflection. "Been taking a little exercise, I see," and walked to the opening of the laboratories. "Don't overdo it," he added.

"Sarcastic devil!" Lawson muttered. Vane did not have the look of a man who had been running, either; his white linen suit was unruffled and neat, and his low-cut shoes were clean and newly shined.

Henderson looked after him as Lawson strode to the observatory entrance. Inside, Lawson noted that the corridor was bare; before the door to the Consul's room there was a clot of red, damp clay, but that was all. Just as he stooped over to examine it more closely, the door opened and he hopped back. The room, in the short glance he had of it, seemed empty, and one of Hammersmith's pets stood in the doorway. The gorilla distended his wide mouth when he looked at him, coughed slightly, and padded out into the open. The door closed.

"It's funny how dense I get at times," Lawson said later to Madeleine. "I don't suppose there's any doubt that the Consul *can* transmit ideas to others, if those others are in an especially receptive condition for them, *and if he's close enough.* It's that that I hadn't thought of before. The first day I came, your father received a mental message from him, but at the time he was scarcely more than sixty feet away from the Consul's room."

"Why are you so certain that propinquity has something to do with it?" the girl asked.

"That's what makes me think that I ought to kick myself," Lawson declared. "If the Consul were able to control people's minds at any great distance, he wouldn't need all these elaborate preparations; he wouldn't need an air-cruiser, or a force-wall, or the thousand and one lesser inventions he has forced others to use for him. And why? Because, if he could force his will on others 14,000 miles away, he could bring about his 'reforms' simply by making people think about them and believe them. But he can't do that; he's limited to persons close to him, luckily for the world. He can't transmit his notions wholesale, and make people like them."

"Well," the girl said. "We were certainly close to him yesterday."

"Yes," Lawson concurred. "We were close, but obviously not close enough. And then, too, our minds weren't in an espe-

cially receptive mood. We weren't thinking of the possible consequences, but only of laying hands on him. Don't forget, he was almost two miles away before we noticed him, entirely; it was the accident of the rain that made him partly visible closer, just how close I don't know, because it was hard to gauge the distance. And as yet we don't even know the extent of the 'minute of silence.' How close was he when our hearing was blanketed? We have no idea, because we couldn't see him."

"But two miles, even!" Madeleine protested. "If that were all, you'd have a hard enough time. Why, it would be worse than the needle in a haystack."

● "Yes," Lawson said. "But the fact is that we didn't *notice* him until he was almost in the shelter of the buildings. It is quite possible that he was visible before that, but that we simply failed to see him; that we didn't look in the right place."

"It makes it less gruesome to know that he has a body, anyway," Madeleine conceded. "It's horrible as it is, but flesh and blood *can't* be invulnerable."

"Yes," Lawson said. "But we don't know yet what kind of flesh, nor what kind of blood."

"My father said he saw a man."

"So did we. But, at such a distance, we would expect any upright, two-legged creature to be a man. And we never before saw a man with such a head."

"No," the girl admitted.

"Well," Lawson said cheerfully. "I think we've made great advances. We know that the power of the Consul's mind has its limitations; we know that he has a physical presence, and that it is possible to see him. If he lets us live, I see no reason why we won't be able to get him sooner or later."

"I saw one of your pets today," Lawson told Hammersmith at dinner.

"Did you?" Hammersmith said, with no great interest.

"He was coming out of the Consul's room."

"They often do," Hammersmith said. Then, as if realizing that his replies were somewhat brusque, he went on:

"Herr Professor Hermann, the optics wizard, used to give me long detailed arguments as to why the Consul must make himself visible to them. I've wondered about it every now and then myself, whether my gorillas would obey a voice whose owner they could not see. They are jolly intelligent beggars, and they haven't any primitive superstition. Hermann!" he called across the table. "Do my pets see his Intangible Omnipotence, or do they not?"

Hermann masticated with thorough enjoyment before he replied, grinning in the good-humored fashion of an uncaring man who knows his views will be held up to ridicule:

"Certainly they see him, certainly. Your anthropoids, Hammersmith, are not heathen, as we are; they do not follow the teachings of a voice disembodied. Intelligent, they are. They would know a voice after a phonograph, but first they would know the owner of the voice; sniff him."

He beamed over the table.

"All my life I have studied optics," he said. "What would your ape-men do, eh? if they were able to smell a man, but not to see him? I tell you what they would do. They would jump, run, create a commotion. And the Consul does not want that, eh? He wants peace and quietude in his rooms, eh? For why should he want jumping in his chamber, eh?"

He gazed in shameless triumph around the room, boyishly pleased at his own ingenious arguments.

"So? You see?" he said.

"No!" Hammersmith declared. Mock compassion suffused Hermann's face.

"You do not see? But, how elemental!" the German exclaimed. "Look! We will pretend that I am an ape: already I am heavy enough. Maybe my teeth are too short, but we will let that pass. And who shall be the Consul?" He looked around the table, contemplatively, while Lawson held his breath. It was all foolishness,

of course, but he was highly interested, nevertheless.

Hermann's eyes rested laughingly on Hammersmith. Lawson saw the Englishman give a start as Herman continued:

"Hammersmith, *you* are the Consul. *I* am one of your pet monkeys. Very well. I see you. From here I cannot detect your distinctive odor—" he laughed at the sly German wit—"but I see you. You say, 'Hermann, you ape, eat more sausage.' I say to myself, in the ape language, 'Very well, I will do so.'" He crammed his mouth and munched. "I obey. And why do I obey? Because I am hungry?"

He again glanced around the table, enjoying himself hugely. "Partly because I am hungry. But also because you are my master, and have ordered me to do so. Now, however, you are no longer the Consul. The Herr Professor Vane becomes the Consul. I am not looking at him, therefore I do not see him. I have never heard his voice before.

"He speaks to me. He says, 'Stop eating!' Do I obey? I do not. And why, again? Because I do not know him, I do not see him, and Hammersmith is my master. But now I look at him, and he speaks again: in my ape's brain the image and the voice come together. So, the next time he speaks, I know the voice: I respond. But once I must see him first, already. And I must see him enough so that I do not forget. So. Now I am no longer a monkey."

Schulte, his red face blazing with mirth, cupped his hands and applauded vigorously.

"Well done," he cried. "Well done."

"I was not entirely serious," Hermann said modestly. "But it is too bad, sir, that you can not teach your apes to speak; then they could tell us things we do not know about the Consul."

"If they could see him," Hammersmith said.

"*Ach!*" Hermann snorted.

"Professor," Hammersmith said. "You chose the wrong profession. You should have been a barrister."

"Perhaps so," Hermann retorted. "Even an expert in optics finds it difficult to make others see."

"His mind clicks right along," Lawson said to Hammersmith admiringly, when the laughter provoked by the last sally had cleared away.

"He's nobody's fool, despite his actions," Hammersmith admitted easily. "And he so rarely gets angry that it's fun to play with him."

"I'd hate to be around when he *does* get angry."

"Jove!" Hammersmith said. "It's a purple spectacle, and no doubt about it."

CHAPTER XIII

The Work of Ghouls

● It was later in the evening, when the others had left and Madeleine was watching Lawson and her father slowly completing a game of chess, that Lawson received his second big shock of the day. He lifted his head from over his chessmen to hear running footsteps outside; harsh Arabic gutturals and lamentations, and then Berglied's querulous voice crying:

"What is it? What is it?"

Lawson half rose to his feet, but remained crouched to listen to the golden robot's sudden commands.

"Alekhine!" it said, in metallic tones, but loud and peremptory. "Alekhine! Force-wall on full! Henderson! Air-purifiers, full! Alekhine! Force-wall on full! Henderson! Air-purifiers, full!"

The last-named rose hurriedly, ran to the door and disappeared into the night.

"Schulte! Oxygen tanks, beginning stratum three! Vane! Recommission u.-v. globes! Schulte! Oxygen tanks, beginning stratum three! Vane! Recommission u.-v. globes!"

Lawson sprang to the door, but was met by five running men, and was forced back.

"Gas attack!" Hammersmith said, as he came last in the door and slammed it shut. "Planes above!"

"Are we safe?" Madeleine asked. She hadn't moved since the first cry of alarm.

Hammersmith sat down heavily, his face red.

"Perfectly, it's all right now," he said. Then, after a moment, "I knew he shouldn't—"

Hermann, who glowed a dull, beet-red, looked quickly at him.

"He?" he asked softly. There was no humor in his voice.

"No matter," Hammersmith snapped. "Not important, really."

"So?" Hermann said. He squinted at Hammersmith, but kept his peace.

Beside Lawson and Madeleine, there were five men in the room: Hermann, Hammersmith, Manning, Berglied and Guglielmo. They looked at each other suspiciously, like conspirators, fearing that one of their number was a spy. Only Manning was unperturbed; the slight flush that the exertion of running had given him was replaced by his usual pallor, and his dreamy eyes looked, as if unseeing, at the others.

"Barbarous nuisance!" he said, while looking at Hammersmith. He did not seem to expect a reply, and started absently toward the exit.

"Wait!" Hammersmith spoke sharply. He looked at a watch in his hand. "Better wait two minutes more."

Manning gave him the beautifully sardonic look that so poorly fitted him, but waited.

"Why two minutes?" Lawson asked abruptly.

"Clear the mustard out," Hammersmith said. "Air-purifiers full blast."

"What I don't see," Lawson murmured reflectively, "is why they didn't try to gas us long since."

"No equipment, probably," Hammersmith said. "How should I know?"

After a few moments of silence, he snapped his watch shut, walked to the door and opened it. He and Manning walked out together, leaving the door open. Outside was complete darkness, and they were lost from sight at once.

Immediately the robot spoke again, this time more leisurely.

"For the good of Mankind! The danger is past. For the present, we will remain apart from all communication with the world. I have definitely cut us off from the outside. We shall manufacture our own atmosphere; use our ultra-violet* globes during twelve hours of the twenty-four. No light, no heat can come to us, and therefore no harm. Berglied's heating units are now running. The air will be automatically saturated with moisture for seven minutes each hour. For the good of Mankind!"

Madeleine leaned heavily on his arm as Lawson left the room. The darkness outside was impenetrable: he looked up, but there was no light from the heavens. Vaguely he began to discern objects around him; an indirect artificial lighting effect was being put to use. The air seemed unusually heavy with moisture.

An Arab approached; he recognized Ahmed.

"*Sidi Mirikani,*" he said. "May I speak?"

"Quickly."

"The grave of *Sidi Nézan,*" the Arab said.

"What about it?"

"Come," Ahmed said.

Lawson felt in his pocket, gripped his flashlight. Ahmed led him into the night.

At the grave, Lawson saw at once that something was wrong. The wooden headpiece had been knocked down and trampled upon, and the earth had been scooped up and scattered in all directions. There had been no regular digging, and the irregular holes did not extend down to the wooden casket. They looked as if they had been wildly dug by hand. No intelligently directed effort had been made to reach the body.

In the circular ray of his flashlight, Lawson saw the imprint of large, naked feet. There had been no effort to hide the fact that the digging had been recent. Lawson shuddered. He swung his light in an arc into the surrounding blackness, then returned to scrutinize the footprints.

He knew what had made them. There

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* Vibrations above that of visible violet light.

were only two creatures within the force-wall whose wide feet and grasping toes could have caused such definite impressions in the soft earth.

Lawson shuddered again. What uncanny thing was this? Why had Hammersmith's gorillas done their spasmodic digging? They were well-fed, intelligent beasts, and not meat-eaters.

"When was this done?"

"*Baâd cous-cous.*"

After dinner, eh? Lawson thought. Perhaps even since the complete closing of the force-wall. There had been time for what had been done even while he had been cooped up in the dining room, waiting with the others for the gas to clear. And it was possible that the air-purifiers had cleared the air so swiftly that there had never been any actual danger.

"*Méziane,*" Lawson said to Ahmed. "Good work." He gave him a Moroccan banknote, and returned thoughtfully to the dining room.

● "Listen, you," Lawson said sharply to Hammersmith as he entered the dining room. "Where in hell are your gorillas?"

Hammersmith flushed at the tone, but replied evenly:

"Caged, I suppose."

"You think you can get away with a lot of things, don't you?"

The silence in the room was ominous. Vane looked questioningly at the two: Lawson, forefinger extended, leaning over the table; Hammersmith, seated, quietly gazing at the American.

"Just what are you getting at?" Hammersmith asked, finally.

Lawson sneered.

"You don't know, eh? You had no idea that those pets of yours had been digging at Nézan's grave since—"

"What's that?" Vane broke in quickly. "What about Nézan's—"

"Let me handle this, Vane," Hammersmith interrupted. "Lawson, will you tell me what you are driving at?"

"Nézan's grave!" Vane exclaimed. His face was serious, ashen.

"Yes, I'll tell you!" Lawson said. "Some time this evening your gorillas have been digging out there, some time since daylight. Why? Who told them to?"

"Great Caesar's ghost!" Hammersmith ejaculated. "Look here, Lawson. I want you to believe that I know absolutely nothing about it."

Hammersmith spoke with such evident conviction that Lawson was taken aback.

"Well," he said shortly. "Come and see for yourself."

"Under the circumstances, I should insist on seeing for myself."

Only Vane and Hermann accompanied them to the spot where, a few short weeks before, Lawson had seen Nézan's body lowered into the ground. There Hammersmith silently examined the evidence. After a moment he straightened soberly.

"You were perfectly right," he said. "There's no doubt."

"Well?" Lawson asked.

"I wish I knew," Hammersmith replied.

"You know nothing about it?"

"Nothing whatever."

Lawson was not so sure, but he extended his hand.

"I'm sorry," he apologized. "Excuse me for having been hasty."

"Quite," Hammersmith replied, a trifle coldly. "The mistake was natural."

Hermann cleared his throat noisily, and looked at them with narrowed eyes; his round, merry face oddly distorted in the shadows.

"One of you has an explanation, no?" he asked.

The two younger men showed their astonishment.

"No? Then there is only one thing to do." Vane, who had been following the German's facial expressions closely, nodded.

"You agree, Vane? So. Then we must see why it was that friend Hammersmith's pets have tried to become grave robbers."

At first Lawson did not understand. He looked at the solemn faces around him, and it seemed to him that he was attending some eerie voodoo rite. Around all

was darkness, and the flashlight's beam made it all the more menacing. As soon as he understood, he was seized with horror.

"It's the only way to make sure," Hammersmith said.

When they returned, shortly after, bearing shovels, there were other onlookers. Two Arabs stood nearby in amazed silence, and Professor Henderson accompanied them.

Grave diggers! Lawson, in his most extravagant nightmares, had n e v e r thought that he would be called upon to desecrate a tomb. But he realized that the solution of each mystery seemed to lead him closer to the devious habits of the Lunar Consul, and made no overt protest.

For a time the only break in the stillness was the rattle of spades against the flinty rocks which had been imbedded over the grave, as Lawson, Hammersmith and Hermann threw shovelfuls of dirt into a neat mound. A flickering light was cast by an Arab-carried torch. The air seemed heavy, warm; hard to breathe.

Hermann grunted when his shovel scraped the wooden box. Carefully they removed the loosened clay and earth from the top, and worked grimly about the coffin.

"All right," Hammersmith said. "Up with it."

The three looked at each other in hesitation for a few moments. Then, bending far down, their fingers tightened on the wood. They heaved, brought the box to the surface.

Again they stopped to look at each other. Their faces showed perplexity, but also determination. Hammersmith, using his shovel as a lever, pried at the lid; forced it upward. With the squeaking of the nails torn from the wood, it gave way. Hermann grasped it with his two bear-like hands, and Lawson flashed his light within.

The Arabs did not approach, and the others stared in stunned silence, for the casket contained, not Nézan's corpse, but the well-preserved body of a dead gorilla! The light wavered as each man came closer, still silent, to make sure that their eyes were not deceiving them.

Hammersmith, his voice shaky, was the first to speak.

"It's—it's George, all right."

Lawson threw his flashlight's beam on Hammersmith's face, switched it back to the unshrouded figure in the wooden box. In that instant he had noticed that Hammersmith was trembling, and his eyes were fearful. Lurking deep within the shadows he saw the other two gorillas. Hammersmith saw them, too, and called to them, but at his voice they leaped away into the darkness.

To have found the grave empty, would not have surprised Lawson very much. He had a theory to account for that. But finding the gorilla's body upset his calculations. Hammersmith, he remembered distinctly, had told him, laughingly, the first time he had met him, that nothing would please him more than to be able to dissect the Consul's brain. And Hammersmith had suspected Nézan, then, of being the Consul.

● It was not beyond the bounds of possibility, Lawson thought, that Hammersmith *had* already done his ghoulish work, even now had Nézan's brain in his laboratory. But then, why had he believed it necessary to replace the body with that of a gorilla? There were numerous implications in the thought that caused Lawson's mind to race in rapid, concentric circles. Had his story of the lost gorilla, and his anxiety, been only a "plant" to throw Lawson off the track? Had his search for the gorilla he called "George" been only a pretence? If it had been genuine, Lawson admitted to himself, his whole case against Hammersmith might have to be discarded. And Lawson wasn't ready to do that. Why, now, was Hammersmith afraid? Was he fearful that his guilty secret had been betrayed?

Vane, after his first apparent surprise, was now his usual unperturbed, sardonic self. While the others stood helplessly to one side, he carried on a close inspection

of the anthropoid, his face set in a slight, fixed smile.

"What's your diagnosis, Henderson?" he asked suddenly. Vane stood before him, rubbing his hands together as if in expectation of some pleasantry.

"Diagnosis?" The word came out unwillingly, as if he were not quite sure what Vane had meant by the term.

Vane cocked his head to one side, and posed for a moment in that position.

"Yes," he said. "In your opinion, doctor, is the patient dead?"

Lawson wondered where all this was leading to. It surely had some significance that eluded him.

"Dead?" Henderson repeated. "Are you dreaming, Vane?"

The man addressed looked at him evenly, almost contemptuously. Henderson, in characteristic fashion, drew his hand over his eyes.

"George is dead," Vane declared.

"Well?" Henderson's voice was veiled, tense. His eyes looked coolly into Vane's. He was no longer the typically absent-minded professor that Lawson was accustomed to see. "What of it?" He spoke sharply.

"You agree?" Vane asked.

"Let me have the light," Henderson said to Lawson. He stooped over the figure in the casket, then looked back over his shoulder at Vane.

"Here's what you want," Vane said. He handed him a long, glittering surgeon's knife. Henderson took it with a nod, plunged it emphatically into the gorilla's chest over the heart. Lawson gave a start, but noticed that, while Hammersmith and Hermann both showed astonishment, Vane was perfectly matter-of-fact. He and Henderson leaned over the body for several seconds. There was no quiver, and no blood flowed. Vane and Henderson turned to face each other.

Hermann, at first highly perplexed, grunted in comprehension.

"So you two diagnosticians agree now, finally?" he asked, with irony.

"Vane's diagnosis, I hope, has been confirmed," Henderson said.

Vane nodded, although he looked somewhat disappointed. Whatever he had expected to happen, evidently had failed to materialize.

"Well," he said, almost shamefacedly, as if apologizing for Henderson's unexpected deed. "It's best to make sure."

"Of course," Henderson said decisively.

"What in the name of—" Lawson began.

"I think I can explain," Hermann interrupted. "If I am wrong, these pleasant gentlemen here may correct me. Young sir, you must know that this is a very, very devious affair, yes?"

"Yes."

"It is so dark and devious," Vane broke in, "that we can afford to leave no gravestones unturned."

"You see," Hermann said. "This is a serious matter. Our surgeons here believe it entirely necessary to substantiate even the fact of death. Otherwise, how could one believe what one sees?"

Lawson felt weak, unnerved.

"I get it," he said shortly. He understood what Hermann was hinting at, but he didn't fancy it as a solution.

"I imagine you'd better cremate it," Vane remarked to Hammersmith. "That is, unless you want your pets to be breaking the French penal code at all hours."

Hammersmith gestured to the Arabs who had been watching the scene with popeyed curiosity. There were three of them, Ahmed having appeared shortly before the stabbing. The natives, however, backed away; refused to approach the box. They only jabbered their incomprehensible *Chleuh* faster when Hammersmith angrily commanded them to carry the gorilla's bier.

Vane laughed in ridicule.

"It looks as if we'll have to be our own pallbearers," he said.

When Lawson, anxious to get the affair over with, started to lift one end of the box, Ahmed slipped up behind him and whispered warningly into his ear.

"Don't, master," the Arab said. "Let him walk."

"He is dead," Lawson replied.

"No, Sidi," Ahmed returned. "Not dead. The Arabs know. For a long time we have known. The big monkeys are accursed. The spirits of living men dwell in them."

Lawson knew that the Arab had spoken in all seriousness, and did not wish to appear to disregard his advice. Although he naturally scoffed at the idea, he was certain that, unless he did something to allay the Arab's fear, Ahmed might be afraid thereafter to tell him other things. "Nonsense!" he said in English. Then, in Arabic, "We have strong charms, Ahmed. We are not afraid of that."

Ahmed, partly reassured, stepped back, although there was still a superstitious alarm in his face. Lawson and Hammersmith picked up the box, helped on either side by Hermann and Vane. Professor Henderson made no effort to aid them, although the box was very heavy.

CHAPTER XIV

The Second Warning

Lawson slept uneasily that night, his slumber disturbed by a hundred nightmarish grotesqueries. Some of the dreams were exceedingly vivid. Time after time, he seemed to be digging at Nézan's grave, only to begin again when the box was finally reached.

Once, while digging, he looked at his companions and experienced a cold fear when he saw that they had the bodies of gorillas. Ahmed crept up behind him, leering. He, in the detachment of one who knows he is dreaming, saw the Arab plunge a knife into his back.

Again he stood by the grave, unable to move or speak. He was deathly afraid of something, but before he could tell what it was, Henderson deliberately drew an incredibly long, unsheathed, bloody knife from his pocket, and stabbed him in the heart. "The Consul is dead," he heard Vane say sardonically. Vane's smile was like a death-mask, the *risi mortis* unchanging on his face. Lawson felt himself grow faint when he saw that it wasn't Vane, but Nézan, he was looking at, a live Nézan, but smiling the smile of death.

He awoke in a cold sweat, and turned on the light by his bedside. He was relieved to see Kortner's sleeping form in the bed across from him. But when he fell asleep again, shortly after, the horrible dreams returned.

He was digging, but the more he dug, the deeper into the earth the coffin became imbedded. He heard a cry; looked up to see the earth caving in over him. Again he was on the surface, while Hammersmith, with the face of a dead gorilla, pried up the lid. The top flew off, and Hermann, spick and span, stepped from it, laughing. "Elemental," he said.

Ahmed came up to him, and Lawson recoiled when he perceived that, under his *burnous*, the Arab had no face. Madeleine Henderson, carried in the bulging arms of a gorilla, was placed in the casket, which was lowered into the earth. When Lawson screamed, "She lives!" the others did not hear him.

"Sh!" Hermann said, "the minute of silence." Lawson fought to get to the coffin, to rescue Madeleine, but the sickening realization came to him that the grave was just outside the force-wall, and he could not pass through it. "An interesting reaction," Vane said to him mockingly. "Sixteen pounds to the square inch."

He was again in the Consul's bare room, and at his feet was a yawning pit. "Sit down," a metallic voice demanded. Lawson sat, confidently, but he began falling . . . . falling . . . .

Always he returned to his digging, and always he was jolted by some hideous and unexpected happening. Sometimes Henderson was in the coffin, sometimes Vane, sometimes it was empty. He carried it, alone, through miles of darkness and discovered when he reached the fire that he had been carrying Nézan. "Burn him, master," Ahmed cried in English. Lawson threw him on the fire, exhausted and weary, and noticed that the body was like marble, did not burn, and that the face was smiling with Vane's thin lips.

"Qui est le Consul?" Nézan asked, in

a voice like Vane's. "Who is the Consul?"

"I don't know," Lawson said.

Professor Henderson, the flames licking around him, raised on one elbow. "Who is the Consul?" he asked. Lawson, about to repeat that he did not know, noticed with dismay that a long, wicked knife protruded from Henderson's breast. Trying to be helpful (not to excite the fellow), Lawson said, "That sliver in you, take it out." Henderson drew the fire around him in the form of a *djellaba*.

"Insh' Allah," he said. So it had been Ahmed all the time, Lawson perceived with relief. Two large snakes wormed their way from Ahmed's eyes, snakes whose heads grew to become gorillas' skulls. "I don't know," Lawson said. A metallic voice asked, "Who is the Consul?"

The gorillas seized him, placed him into the coffin. The Arabs screamed their woe. He felt himself lowered into the grave. "Who is the Consul?" he heard again. He pushed against the coffin's lid with all his might, and bits of red clay, like blood, began dropping over him. "I don't know!" he shrieked. "I don't know!"

He awoke with a start and saw that Kortner was bending over him, shaking his shoulder.

"What's the matter, Jerry?" Kortner was saying. "What's wrong?"

"Whew!" Lawson whistled. "Thanks for waking me, Kort." He looked around the dimly lighted room, still apprehensive. "Some nightmare, Kort."

"You had me worried," Kortner said. He peered at Lawson, his pupils wide-distended.

"Did I yell?" Lawson asked.

"I'll say you did," Kortner returned. "When I woke up you were twisting about, saying, 'I don't know. I don't know.'" He looked at him curiously.

"Some nightmare!" Lawson said. "They were asking me who the Consul was."

Kortner laughed, in the manner of one who has no difficulty keeping a secret.

"And did you know?"

"I certainly didn't."

"What do you mean, *who?*" Kortner asked. "Do you think it is *some*body?"

"Sure. Don't you?" Lawson looked at his roommate in faint surprise. It seemed odd to him that he, who had had little fear in the Consul's den, would be willing to prolong a conversation through fear of another horrible dream.

"I hadn't thought," Kortner said. He looked at his watch. "Almost five o'clock. Guess I'll try a little more sleep."

Lawson shivered, although the room was oppressively warm.

"Not for me," he said. It would be dawn soon, and then, he felt, he would be able to shake off the helpless feeling of horror that his nightmares had given him. "Must have been something I ate," he said absently, as he arose to dress.

● Outside, the darkness was still complete. His spirit sagged when he remembered that there would be no dawn for him to see that morning; perhaps for many mornings to come. He had expected the light of day to help him rid himself of his depressed feelings, but he remembered the air-raid of the night before and the closing up of the force-wall. Now his contact with the outside world, unsatisfactory and incomplete as it had been, was entirely shut off. The news of Mussolini's serious illness had been brought to him over the television set the day before. He wondered how he was getting along. And the amalgamation of Sweden and Norway: was that going through?

Far above him he distinguished a pale, purple glow, evidently the beginning of Vane's invisible ultra-violet radiations. It did not emit much light, but enough so that there was a difference between light and shadow. He walked to the edge of the buildings, and saw that the light, such as it was, did not extend even a quarter of the way to the force-wall. Around the dimly lighted structures was a rim of feebler light, and beyond that, darkness.

Brooding, his hands in his pockets, Lawson made a circuit of the buildings. The light did not increase in intensity, and

he realized that the small world within the force-wall's sphere would thereafter be a gloomy place in which to live.

He went to the dining room, which was empty and bare and walked through the corridors of the three buildings. He felt morose. The sleep-laden atmosphere made him feel stealthy. There was a continuous feeling of uneasiness. Lawson was suddenly certain that he was being watched, but he saw nothing to make him fearful. Did the Consul have a means of knowing when anyone left his room at night? He probably did, of course. There might have been a system of alarms.

Lawson walked to the observatory and entered it. That was Henderson's room, that Vane's, that the Consul's. The door to the fourth room, which had been Nézan's, was slightly ajar.

"Hello," Lawson said, in some surprise. He walked to it and looked in. The room was similar to the rest, plainly but comfortably furnished. In one corner a sleeping gorilla lay curled. Lawson at first had the uneasy suspicion that this was the same animal they had found dead the preceding night, until he perceived that it was breathing regularly. Although fully convinced, intellectually, that Hammersmith's pets would not bother him, he was unable to rid himself of the impression that they might be dangerous. He backed cautiously away.

The thought of what Ahmed had told him about the anthropoids came to him: "the spirits of living men dwell in them." That, of course, was too far-fetched for belief. He stopped a moment in front of the Consul's door to listen; looked at the dim, green moon on it. It was cleverly contrived to give the illusion of reality. He saw, on the upper hemisphere, the fatal date:

FEB1
1947

He looked closer, more puzzled, at the inscription below. This was something new: it had not been there before. He looked again to make certain. Sure enough, there was another date etched into the replica's surface:

LUNA
12-1

There was to have been a full moon that night, Lawson knew, but because of the force-wall, he had not seen it. Was it possible that the earth had already learned of the inscription, and even now was in a turmoil wondering what it meant? Could that have been the reason for the belated air-raid? Was some new horror to be visited on the world already torn by fear and catastrophe?

Luna 12. That meant April 1. Less than a week away. Whether it was five days or six, Lawson wasn't sure. And if that inscription had appeared within the last twelve hours, say . . . .

Without hesitation, Lawson pushed at the door. It gave easily, and he entered the room. If his theory were correct, he still had time for an investigation. And if it were not . . . . Well, better men than he had died for less worthy a cause.

The room was dimly lighted. Lawson stifled a cry of astonishment when he saw that, far from being bare, it was as completely furnished as his own. It differed from his in that, above the window, there was a platform, from which spiral steps ran in two directions; toward Vane's and Nézan's rooms. And on the platform, facing him, was a copy of the golden robot at the dinner-table.

He accepted the fact that the Consul was gone. He must have taken the cruiser immediately after the air-raid, which, as it operated with gravity-repellers, could easily become a space-cruiser. It staggered Lawson's imagination to think that, even now, the Consul was returning from the moon! He deduced that he could not cut those immense trenches in the lunar face from his base on earth, but had to approach closely to control whatever tremendous power he used for the purpose. And the Consul would return; he had other work to do.

Lawson went over the room, bit by bit, but discovered no secret doorway; nothing that gave him an additional clue. As he turned to leave, he was startled to discover

that the gorilla he had seen sleeping was watching him from the open doorway; watching him silently and curiously through red-rimmed eyes. How long it had been going on, he did not know. The gorilla backed away as Lawson left. He closed the door behind him, conscious that the gorilla followed him with his eyes, and breathed easier when, in the semi-darkness outside the observatory, he saw that the gorilla remained within.

Lawson now had a plan. He sat on the top step of his dormitory, from where he had an unobstructed view of the observatory's two doorways, and waited.

He had about an hour and a half until breakfast. He looked at his watch and smiled almost triumphantly. The Consul could not read minds that were resolutely closed to him, that was a practical certainty. Whoever had been the "traitor" had so far gone unscathed. That he was a human was as nearly equally certain; the bed in his room, for one thing, but more especially the silence which came with him. What the secret of his invisibility was, Lawson did not know, but if he were intangible he would have no fear of making noises or sounds as he walked. And he did walk; both Madeleine and Lawson had seen him.

● His "humanity" was shown more clearly by his leaving for the moon, Lawson thought, than by any other way. He had left in a fit of pique that he had been forced to use the force-wall at its full strength to keep from coming to harm. That quality of sudden resolution, of childish anger, gave Lawson what he considered one of his most important clues. If the Consul were actually an "invisible omnipotence," his plans would be likely to move more smoothly; there would be no quickly overwhelming anger that would send him out for swift retaliation, and small, unimportant setbacks would not upset him.

It would still be no easy thing to find out the Consul's identity, but Lawson now had ways and means. Vane and Henderson were the only two who lived in the observatory at present. If either, or both, came out before the return of the space-cruiser, Lawson could eliminate one or the other of them as suspects.

For a few seconds, he wondered about the gorillas. After all, there might have been something in what Ahmed had told him. He had seen one alive, and another was surely dead. But if the Consul, as an intangible entity, had taken over one of the gorillas, there would be no need, he thought, of the "minute of silence," or the use of invisibility. The gorillas, like well-trained pets, were seen everywhere, though not especially noticed. No, Lawson thought, he could afford to rule them out.

There still remained the chance that the Consul might be someone whom Lawson had never known about; some scientist, who, having known of Nézan and his comparatively inaccessible observatory, had taken it and kidnapped the others. Whoever it was, Lawson marvelled at his power of blanketing the minds of intellectual men.

Despite his lack of sleep, he felt that his brain was especially lucid, and ideas came to him in rapid succession as he sat perspiring in the half-light. How would he be able to see the Consul? The answer came to him even as the first thought of his hopelessness left him: Kortner's camera! Both he and Kortner, he remembered, had used it occasionally. He had taken pictures of the houses, of Madeleine, of the mountains to the south; these during the early days of his captivity.

Kortner had taken fewer, although there would be celluloid likenesses of most of the scientists, taken in unconventional poses. The films, as yet, had not been developed, but Lawson would see to that at once. It was not beyond the realm of possibility that he would find something there. The Consul was invisible to the eyes of ordinary persons. The inhuman camera lens, with its photographic record behind it, might have caught him unawares.

Lawson started to rise, then sank down again with a groan. Yesterday, even, he

might have photographed the Consul, but yesterday he did not think of it. Today it might be too late; the light was too weak for picture-taking. Unless — they had spoken of Vane's infra-red telescope, which he had developed with Schulte — unless, in the dim purple of the ultra-violet radiations, there were unseen infra-red rays. Under that circumstance alone could the sensitive celluloid receive the impression of the objects around him. To leave now, in search of the camera, however, might upset all his calculations. The space-cruiser, in the short time of his absence from this point of vantage, might swoop into the clearing, and Lawson's best opportunity to date would be lost him. Lawson turned as Madeleine Henderson, who looked appealingly tired, greeted him.

"Up already?" he asked gruffly.

"It's been so terribly stuffy," the girl said. "I scarcely slept a wink."

"Wait a minute," Lawson said.

He went to his room, knowing that Madeleine could keep watch as easily as himself.

The camera, a small vest-pocket affair, was lying in plain sight on the bureau top. Lawson saw that he could still take five pictures with the roll. Returning to the steps, he slipped the camera into his pocket, and rubbed his steaming face with a handkerchief.

The hourly, artificial rain was falling to the ground with a hiss. For a while the air was cooler, and Lawson inhaled huge gulps of it, but slowly the temperature again rose to its new tepidness.

"Isn't the heat horrible?" Madeleine asked. "Everything is so wet, and it's hard to breathe."

Lawson fervently agreed, before telling her of his night's wanderings. The girl listened apathetically until he reached the point in his narrative where he had come across the new inscription on the miniature moon.

"It can't be!" she cried.

"Do you know what it means?" Lawson asked.

"Yes," the girl said. "But it can't be! It's too horrible! He wasn't going to use it unless the other plans failed."

Lawson stared at her.

"My father told me," Madeleine continued. "The robot announced it when they were first brought here. In the case that everything else went wrong, the Consul was preparing a machine to destroy the brains of those who disagreed with his teachings."

"But how—?"

"He thought that the world's best minds would naturally side in with him. His machine would kill all those of only medium or low intelligence. Don't ask me how it works. My father tried to explain, and he certainly believed it possible. It has something to do with the broadcast of sound on very small wave-lengths. Only the stronger brains will be able to resist it. Those who are weak, or sick, or naturally deficient, will be overcome. The sound will finally tear apart the tissues of those unable to resist, and that only after great and increasing agony."

CHAPTER XV

"For the Good of Mankind!"

● Lawson nodded grimly.

"Sound could do that," he said at last. He had read somewhere of the effects of certain sounds and rhythms on human life, and knew that insanity or death would result from them. If the walls of Jericho had been reduced to crumbling dust by the steady and insistent rhythm of pounding feet, if the vibration set up by marching men could destroy steel bridges, how much more deadly the right combination of vibrations could be on human tissue! An unknown resonance, even unheard, might tear a man limb from limb.

"But has he tried it out? Does he know it will work?"

"He has tried it out," the girl said. "So far, only on animals."

"And they died?"

"They died," the girl said. "Hammersmith examined their brains afterward, and they were all broken up and congested. There were no other marks on

them. From the outside, no one could tell. Your gorilla last night was probably one."

"Good Lord!" Lawson said morosely. Theoretically, he said to himself, it might be better for the race to remove with one fell swoop those who were eugenically tainted with cerebral weakness, so that the oncoming generations might not be bothered with their helplessness. But what man could set himself up as judge? What man should be allowed to so tamper with nature in her blind processes? Surely not the Consul. Surely not, at his arbitrary command, should such wholesale murder be instituted. And once begun, where would it stop? If the world did not fall to heel, would not the Consul step up his machine's power, kill those higher in the intellectual scale?

"Do you know whether he has made any estimate of the number he expects to destroy?"

"He *figured* on ten per cent," the girl said. "But he has never tried it on a large scale. It may be much stronger than he thinks. It may even destroy the entire race. Once he has set the broadcast going, it may continue after the machine is stopped. It may wipe out everything. It is the most awful thing I've ever heard of."

"Ten per cent," Lawson mused. "That would be two hundred million as it stands. And if it got out of control, there might be no end to the destruction. Suppose, accidentally, it killed twenty, thirty per cent. Six hundred million! Holy Mother of God!"

"And I'm sure, whoever he is, that he doesn't understand," Madeleine said. "He must be mad! Completely and irrevocably and finally mad!"

Lawson spun around as he heard Hermann's heavy voice.

"Guten Morgen!" he called. "What heat, eh? Who is finally mad?" He turned toward the girl.

"The Consul," Lawson answered, when Madeleine did not reply. Hermann was human, sympathetic, perhaps could be of some aid. "Professor, have you heard of this ray that can destroy all brains except the very strongest?"

Hermann fell back a step, mopped his streaming face.

"Ach, Gott!" the German exclaimed. "You mean, he will use it? *Heiliges Mütterchen!* Tell me! He will use it?"

In a few words, Lawson told what he knew.

"I have warned him," Hermann said. "Even when he first told us of it, I have warned him. *Ach, du Lieber!* Has he no eyes, that he can not see? I am an expert in optics, yes, but I know other things besides. He told us, first, that he would kill the morons only, the idiots, like we would throw away the dregs from the bottom of the beer-vat. Even then I told him. 'The animals?' I asked. 'The dogs and cats and cows and sheep.'

" 'What about them?' But he did not see. His robot did not answer me, and my arguments were good. You see? The birds and horses, all would die. And what, then, would keep the insects from us? The birds that ate them, where would they be? I knew. Ants he kills, yes, with his machine, and bees, but the thousand other insects, no. They work by instinct, and their minds do not count."

The three of them talked the situation over. Hermann, of all the scientists, Lawson knew, was on their side. Even the Consul could not be two places at once, and he was as certain, as he had ever been of anything, that the Invisible Master was outside the force-wall.

They waited together another fifteen minutes, curbing their mounting impatience. For that quarter hour the inert atmosphere was quiet. Then, just as Lawson was on the verge of going to his room to wash and shave, a great blast of light from the force-wall's ceiling, shut off at once by the brooding darkness, brought him upright with a jerk.

No sooner had Lawson backed into the deeper shadow of the doorway than, with a rush of warm air, the space-cruiser came to a landing on the damp grass. He heard the faint click of the opening hatch, kept his eyes shifting from one observatory

doorway to the other. For several seconds whoever had issued from the space-craft was hidden from sight; then Lawson saw a lone gorilla bound up the stone steps.

The American unloosed a flood of inaudible profanity, leaped from his hiding-place, and ran to the observatory, skirting the golden cruiser as it was automatically lowered into the ground. The passage-way was empty. He ran to the Consul's room, noted that the ring of his feet on the stone floor was deadened, more than muffled. When he pushed, the door remained shut, and, as he stepped back, he saw that the door to Nézan's room was likewise closed.

The silence had descended over him, and he was sure, now, that he had muffed another chance, but he walked in absolute quiet to the observatory proper, which extended behind the four identical rooms. There the darkness was nearly completed. There was no need for light, even had the force-wall been absent. He barely saw the shining telescope's thick shaft; knew that for the present, at any rate, it was useless.

He returned to the others, softly but savagely cursing himself.

"Nothing?" Hermann asked eagerly.

"Nothing," Lawson replied. "Not even a picture." He explained the dilemma that was worrying him.

"The infra-red?" Hermann said. "But of course it is here, young sir. Perhaps your films will not take it? Yes, that is possible. But try, and if you fail, I will have something ready for you."

● Hermann patted his shoulder in fatherly fashion.

"Do not lose heart," he said. "After all, we have nearly a week." Hermann started to leave, but turned to ask:

"You can develop your pictures?"

"Yes," Lawson said. "If I can find a dark room."

"In my laboratory," Hermann said. "I have everything you need." He disappeared into one of the yawning doorways.

Lawson took the camera from his pocket.

"All right, Madeleine," he said. "You stand over there."

"For my picture?" she asked. "Not when I'm looking like this."

The eternal feminine, Lawson muttered to himself. She looked good to him. What was the matter with her, anyway?

"It's for the good of science," he said. "Go ahead."

"No," she said. "Not now. Some other time."

"Oh, all right," Lawson submitted. He swung the camera away from her, snapped one picture of the observatory. He turned the roll, snapped another of the building opposite, then walked into the clearing and took two more.

"We'll see about this science of optics," he said. "You wouldn't imagine a camera could take pictures on a day like this." He rubbed his hand meditatively over the bristles on his face.

"Why don't you go in and shave?" Madeleine asked.

"I would," he said. "Only I want to see who comes out of the observatory, if anyone."

"I'll watch," the girl declared.

In his room, Lawson removed the roll of film and placed it with the others in a zinc-covered box. He saw that there were four that were unused, two already exposed.

Kortner was ready to leave by the time Lawson had finished his preparations, and he shaved and washed in silence, a puzzled and worried frown creasing his forehead. It was uncomfortably hot in the room, and his face felt better when he had washed the last bit of lather from it.

"What a night!" he said to himself. It seemed incredible that he had been having his devilish dreams only a few hours before. Considerable water had flowed under the bridges of his mind since then. He wondered whether the Consul had already announced his warning to the underworld. There would be no point to it, he thought. It would only increase the turmoil, drive the world to its breaking-point. Who could have such overwhelming confidence in the resisting quality of

his mind that an announcement of the death-broadcast would leave him unaffected, unfearful?

The breakfast light had begun to glow by the time Lawson returned to Madeleine.

"Well?" he asked.

"Nothing unusual," she said. "Hammersmith came out first, about five minutes ago—"

"Hammersmith!" Lawson broke in. "Hammersmith! What was he doing in there? How did he get in? You didn't see him go through the front, did you?"

"No," the girl said. "But he could easily enough have gone in through the back door. There's another door beside those we can see from here. My father and Vane came out together, a minute or so before you did."

"Thanks," Lawson said. "Ready for breakfast?"

Hammersmith, eh? he thought. What would *he* be doing in the observatory? It had been Hammersmith who had increased the power of the gorillas' minds by his H-ray so that they were at least as intelligent as human savages. Might this machine for broadcasting the brain-death be some reversal of that which would break down the cells in the brain tissue? Hammersmith, after all, was a brain specialist. It was not altogether impossible that he should have a finger in the Consul's pie.

"Hammersmith, eh?" he r e p e a t e d aloud. "Well, what do you think of that?"

"I suppose I may as well eat," Madeleine replied. "Although I don't feel especially hungry."

The first meal of the day, under the artificial lights, was an unusually dismal one. Everyone was tired, listless, as though from lack of sleep. Then, too, the atmosphere was sluggish, too warm and sultry. There was little conversation. Everyone's face was drawn, slightly haggard. Everybody looked, Lawson thought with exasperation, as if he had been drawn through a knothole.

The robot's announcement dropped like a bombshell into the midst of their fatigue:

"For the good of Mankind! On the fifth day hence, Luna 12, at fourteen o'clock, Greenwich standard, I shall put plan number two into effect. The world was warned at four o'clock this morning that my Resonating Ray will play upon Earth at that time. Those who cannot brace their minds to withstand it, will perish. Only the ignorant and foolish oppose my projects, and they must go. For the good of Mankind!"

A stunned silence greeted this latest promulgation of the Consul. Vane was the first to break it. He turned pointedly to Henderson, and said:

"A blessing, don't you think? A few hundred million less April fools in the world."

"A damnable thing," Hermann said. "Who is it that sets himself up to be God?"

Henderson made a move of distaste, started to speak, but changed his mind. Everyone, with the exception of Manning, whose impassive, far-away look did not change, seemed shocked; s u r p r i s e d. Doubtless, Lawson imagined, they were thinking of their friends, good men and true, persons now under the threat of death.

"His Invisible Omnipotence," Vane said sourly, "Executioner of the feeble-minded."

Hammersmith turned to Lawson.

"I examined George last night," he said. "Poor blighter. His brain was all broken up."

"His won't be the only one, if the Consul has his way," Lawson returned shortly.

"Who can stop him?" Hammersmith asked.

● At ten in the morning, Lawson was poring over the damp prints from Kortner's camera. Most of them, after a brief inspection, he put aside without comment. There were two shots of the mountains to the south, four of the buildings taken from various angles, and one of

Lawson himself (taken at some time when he was unaware of it, showing him abstractedly lighting a cigarette). The rest were mainly of the various scientists, in the usual poses. The pictures he had taken in the darkness of the morning had been completely unsuccessful.

Hermann, too, looked at them, carefully and thoroughly. He examined every square centimeter of their surfaces, as if to detect some flaw. Methodically, when he had completed his first cursory examination, Lawson went over them again.

Finally Hermann looked up.

"I find two," he said.

"Two what?"

"Two of the pictures," Hermann said. "Two which may be showing something we do not know already."

Lawson, having noticed nothing that pointed even vaguely to a clue, remarked:

"I haven't seen anything."

"No?" Hermann said. "Well, young man, what were you looking for?"

"Well . . . ." he began. "Something out of the ordinary, not pictures of people we know."

Hermann laughed.

"You thought we would have a nice snapshot of the Consul with a crown on his head? That would be obliging of him. But he may be in one of the pictures, without our knowing it. See this one, for example."

Hermann passed him a print. Lawson placed it carefully on the table before him and bent down to study it. He had seen it twice before. There were only three figures in view: Hammersmith, followed by one of his gorillas, and, at some distance behind him a tall, white-haired man, his back turned to the camera, entering the observatory passageway.

"Who is it?, Henderson?" Lawson asked. "No, wait a minute. Vane, I guess."

"Yes," Hermann said. "It might be either, might it not?"

"He's too far away," Lawson said. "Or we might find out from his clothes."

"Second exhibit," Hermann said.

Lawson took the photograph. It had been taken outside the square of buildings, showed Guglielmo conversing with Alekhine, neither aware of the camera, the latter with his mouth wide open, as if in surprise or anger. Behind them, Lawson saw one hurrying leg and a backward-thrust shoulder of someone in a white suit.

"The shadow," Herman pointed out. "You see it?"

He hadn't, but now he did. The sun must have been nearly overhead, as the shadow on the ground was curiously foreshortened, but it was distinct, even though it seemed all bunched together. There was not much to go on, certainly, but from the shadowy head there protruded something oddly irregular; the head, queerly, was not round, but angular.

"I think I understand that one, anyway," Lawson said slowly. "Those two were talking it over, when along came the Consul. Alekhine was probably more angry than surprised when the silence cut off whatever he was saying, as he had often encountered it before. Yes, I understand that, in a way. But there is one thing that has been bothering me for some time. The Consul must know that I'm out to get him; in fact I told him so. Why hasn't he done anything about it? Why hasn't he put me out of the way? It would be easy enough."

"It is a strange affair," Hermann agreed. "The Consul is satisfied to kill thousands whom he does not know. Perhaps he is like the Arab host, to whom anyone under his roof, breaking his bread, is a friend. He may kill him, but only after he has left."

Lawson gazed at the last picture Herman had singled out for him. The thought came to him that he had none of Henderson, Vane, Manning or Berglied. Was that simply a coincidence, or had they kept themselves from being photographed? And if so, why? A picture of Professor Vane, certainly, would look only like Professor Vane, and he would have no especial reason for being camera-shy.

Before he left, Hermann gave Lawson a small, photographic appliance of his own invention, scarcely larger than a matchbox.

"It will take six pictures in rapid succession," Hermann said. "The film is sensitized to the infra-red rays. One pushes the button, here; the rest is automatic."

"Thanks," Lawson said. "I'll see what I can do."

"You will need patience," Hermann warned. "Patience, and then more patience. If the Consul, perhaps, comes to my laboratory, invisible and silent, you may be sure that I shall have his picture, from all angles."

Well . . . . Lawson did not like his part at all. Was he to stand around, peacefully clicking his camera into the empty air, hoping against hope that the Consul might unwarily pose for him? Was that any way for a full-grown man to act?

CHAPTER XVI

Hermannite

● At the end of two days, Lawson felt that he had reached the breaking point. The humidity was continually high, the heat intense. He felt that his energy had been sapped, undermined. And during that time he had not had the slightest hint of the Consul's presence. He haunted the corridors, matchbox camera in hand. Not once did he experience the minute of silence. Had the Consul learned of his new plan?

The others, too, were feeling the tension. If it had been only the heat, Lawson felt that the situation would be bearable. As it was, the threat of world annihilation hung over them all. The Consul's resonating machine, ready to sound off in three days, loomed in the immediate background, like the shadow of a rope to a man condemned to be hanged.

Hammersmith was no longer cheerful, scarcely spoke, and the dining room at meal times was hushed and silent. Hermann, within forty-eight hours, had grown appreciably thinner, and Schulte had lost a goodly part of his appetite. Vane, Manning, and Berglied, and sometimes Henderson, were more or less unchanged. Vane's cynical remarks were fewer, but sharper, and his jokes had a tombstone quality about them; Berglied was apprehensive, but that condition was natural for him. Henderson, morose and nervous, presented the same contradictory appearance, half apathetic and half fearful; and Manning, impervious to the feelings of the others, seemed not to take notice of the new conditions under which they worked. Snow or rain, sun or clouds, he saw the world in an unchanging light of his own.

Lawson was still puzzled. First, how could he get a picture of the Consul, and second, supposing he did take a picture, by some lucky accident, how, later, would he be able to catch him? There were only two that he was certain of: Hermann and the "traitor." He was sure, from his behavior, that Guglielmo was the "traitor," but, if he made any suggestion that he knew it, he was afraid that the Italian would suspect his motives and shut up like a clam.

Madeleine looked appealingly bedraggled, Lawson thought. Her hair hung limply in the steaming air, and her face, although tanned both by the sun and Vane's ultra-violet globes, was pale and wan under the coloring. He found himself looking at her during meals, fascinated by the spiritual beauty of her tired face. She noticed it, but seemed neither pleased nor displeased, and screened her eyes behind her long, curling lashes.

Late in the afternoon, shortly before the dinner hour, Lawson shifted uneasily, from the stone steps in front of the observatory, as one of the gorillas left the building, then resumed his place. He was not built for inaction. A waiting game was not his strongest point. He glanced hopefully into the hallway, and suddenly saw that the Consul's door had begun to swing open. Waiting a moment, he snapped the button of Herman's instrument. Even as he snapped it, he knew that the Consul was near: his ears were filled with the unpleasantly cloaking si-

lence that accompanied the Consul's movements.

When the matchbox ceased vibrating, he spun upon his heel to go to his room, not knowing what to expect. He felt no doubt that, had the Consul been in a position where the camera might have caught him, something would happen, and at once. A clammy sweat broke over him, but, if the Consul had seen and known, he gave no sign. The silence continued as Lawson hurried away, casting glances over his shoulder, his muscles unconsciously tensing for the action that did not come. Once back in his room, he shut the door tightly, and the buzzing in his ears forsook him.

Kortner was drying his hands when Lawson entered. He looked at the newcomer coldly, and quietly threw the towel into a chute when he was finished with it.

"What have you been up to, Jerry?" Kortner asked. His voice was devoid of warmth, contained a hint of menace.

"Nothing special," Lawson replied.

Kortner's cold stare continued. There was something unpleasantly like loathing in it, as if Lawson were a thing unclean. Lawson felt like asking him to take off his glasses, and step outside with him, into the alley. He did not have the control of his nerves he had had earlier. He felt that a good smash to Kortner's jaw would relieve him considerably.

"You've stuck your foot in it, whatever you've been doing," Kortner said. "I'm moving out. Going to take Nézan's old room."

Lawson advanced toward the other, and Kortner shrank back, as if afraid of bodily violence.

"Was that your own idea?" Lawson asked. He clenched his hands angrily. He was shaking slightly from anger, unable to control himself. The continued heat and the darkness had made his temper short and ugly.

"What's wrong, Jerry?" Kortner asked, placatingly. "What's the matter with you?"

"Yeah?" Lawson said. "What's it to you what's the matter with me?" His reason reasserted itself, and he relaxed a bit. His look at Kortner changed to one of scorn.

"All right," he said. "You're leaving. Well, get out! Get the hell out before I throw you out!" He was about to say more, but he held himself in check while Kortner picked up the knapsack he had already packed and walked to the door. There he turned, to say hurriedly:

"You'd better watch out for yourself." He smiled, his face leering. "I'll watch out for Miss Henderson."

Lawson jumped toward him. "Beat it!" he yelled. "Get out!"

Kortner, after a quick, meaning look, closed the door from the outside. Lawson heard him walking down the hall.

He threw himself upon the bed.

"The damned spy!" he said to himself. "The dirty renegade!"

The dinner light winked shortly afterward, while Lawson was still trying, vainly, to rationalize himself out of his anger. Mechanically, he got to his feet, washed his hands and face, ran a comb through his damp hair. At least, he thought, Hermann would be able to develop the pictures. Perhaps he would even know who the Consul was, before the night was over.

● He pushed at the door; it did not open.

Angrily he pushed again, before realization came to him that he was now indeed a prisoner. He thought of Kortner's hint, "You'd better watch out for yourself!" and it didn't calm him any to know that Kortner could have forewarned him had he wanted to.

He poured a glass of beer, felt cooler and more sane after drinking it. This was no time, he knew, to befuddle his mind with an eagerness for revenge. Kortner, after all, was one of the weak links in the Consul's chain. He walked slowly around the confines of his room, flexed his muscles to make sure that he still had, as a last resort, the resource of his strength.

Whether he would be able to break down the door, if it came to the worst, he did not know. He examined the window, saw that

corrugated-iron sheeting, of the type used to cover French store windows, had been rolled down over it from the outside. He had wondered, before, why the sheeting had been placed there, and now he understood. There was but one door, and that one locked. And, although the walls were honeycombed with contrivances to add to the comfort of the dweller within, Lawson did not know that they had any weak spot. Tapping told him nothing; everything seemed solid enough.

Suddenly, he heard a loud knock on the door, approached it warily and silently. The knock was repeated before he cried:

"Who is it?"

"Ah!" he heard Hermann's rumbling voice shout in relief. "You are there, then. May I come in?"

"They locked me in," Lawson replied. "I can't get out."

There was a momentary silence after that, until Lawson said:

"I think I have his picture."

Lawson heard a low-voiced exclamation in German, then:

"Which is your Arab?"

"Why, Ahmed," Lawson said.

"Good, good," Hermann said. "Listen to me closely, Lawson. You know the drop for laundry, no? Look at your watch, Mr. Lawson. In five minutes throw me my camera down, yes. Later tonight, perhaps, we shall find a way to free you. Courage!"

But Lawson was not freed that night. According to directions, he dropped Hermann's camera down the chute, and waited. Nervously, he lighted cigarette after cigarette (made cleverly of synthetic tobacco), but he received no further word. What was the Consul up to? Did he expect to keep Lawson penned up only long enough to put his "plan number two" in execution?

He dozed off now and then. The heat, because of the air-cooling system in the rooms, was not overwhelming, but it was still uncomfortable. He smoked innumerable cigarettes, until his throat was raw, drank quarts of water and beer. He was not surprised to discover that there was no ammunition for the revolver in his knapsack: he regretted that he could not use it to try to crack the lock that held him in.

Lawson was awakened by an insistent pounding on the door. He sprang to his feet, bewildered, not knowing how long he had slept, surprised to discover that he had fallen asleep at all.

"Yes?" he said huskily. "You, Hermann?"

"Open the door, quickly!" Hermann's voice was excited. "Quickly! Perhaps we have no time to lose!"

Lawson wished he had an ax.

"How?" he asked. "What with?"

"Anything, anything," Hermann said. "The Consul is away, but not for long. He is arranging for his broadcast terminals. It doesn't matter. Smash it!"

The door looked solid to Lawson, and his sleep had not refreshed him, but he backed away from it, saying:

"Stand back!"

He lunged at the door with his shoulder, felt it give slightly. He cracked up against it three times. Each time it seemed to yield, but insufficiently.

"Wait!" He heard Hermann's voice again. "Open!" he commanded in Arabic. *"Eftah!"*

Lawson heard a click, as of a lock unlatched, and the door swung open. He stepped back a pace. He remembered that the doors, when locked from the outside, opened only at a spoken key-word: from the inside, not at all.

"Come in!" he said.

There was no response. He hesitated a moment, then went to the door. The corridor was empty.

"Hermann!" he cried. He listened, then heard Hermann's characteristic, throaty chuckle behind him. He whirled about, but as far as he could see, the room was empty.

"Hermann!" he said again. "Where are you?"

"Excellent!" Hermann's voice came to him. He seemed to localize it in the direc-

tion of the bed. "You do not see me?"

Lawson stared; the room was empty. There was no place for a man to hide. Then he noticed that the bed sagged a bit; further that it seemed a mite blurred, as if out of focus. He rubbed his eyes, thought he saw two black spots about two feet from the bed, in the air. Then he noticed what he had not seen before, what appeared to be heat-waves rising from the center of the bed, seen just clearly enough to make him doubt that he saw anything at all.

"It is a success then." Hermann's voice was pleased, and his head suddenly appeared from nowhere, remained suspended and bodiless above the bed.

"What—who—"

"Wait!" Hermann said. "I have not much time to explain. You will remember you spoke to me of mirrors. Ever after I have been working, working, scarcely sleeping. Already I had developed my—what I call Hermannite. It is—well, it is celluloid, and mirrors, and asbestos fabric, and many things besides. But it works, and it is all mineral, and strong, though flexible."

● As he spoke, he seemed to be divesting himself of some tight-fitting garment; more of him became completely visible, and by the time Lawson saw him entirely, Hermann was holding something that appeared to be a sack that reflected all colors of the rainbow.

"But to make a suit from it, that was difficult. And my success is not yet complete. The eyes cannot be hidden, entirely, and it is very hard to arrange it so that it reflects, not what is in front, but what is in back. You saw something, yes?"

"Well," Lawson said, not yet quite recovered from his astonishment. "I thought I saw color over there; not much, but some."

"Exactly!" Hermann said. "Complete invisibility, no. That can not come through this means. But it is dark outside. You will be very hard to see outside."

"I?"

"Yes, you. I have other work. Why is the Consul invisible? We do not know. But we fight fire with fire. Now I work with Guglielmo. We try a gas that makes larger, magnifies, all within."

"Fire with fire," Lawson repeated.

"At first you must be careful. You must see the Consul from a distance. And then closer. Until you know at what distance it is best to see."

Lawson nodded, curiously picked up the suit of what Hermann had called Hermannite. It dangled lightly in his hand, and shimmered oddly, now wholly visible, now partly gone into thin air.

"So. Like this."

Lawson stepped into it, pulled it up over him, and watched his legs, with amazement, disappear behind an iridescent film through which he seemed to see the floor. It gave him a creepy feeling to watch himself become lost to his own sight.

"What work I put on my Hermannite!" Hermann said, with pride.

"The pictures," Lawson suggested. "Did they turn out?"

"Yes," Hermann said. "Very pretty they were, too. But you must hurry. Be off into the hills before the Consul returns."

"Who is it?" Lawson asked. All but his head was now hidden behind the veil of Hermann's invisibility.

"You will know that at once," Hermann said.

Outside both heard the shrill whining of a sudden wind.

"Quickly!" Hermann said. "He returns." With a decisive motion he pulled the cloak's hood over Lawson's head. "Now take this." He thrust a pair of binoculars into the younger man's hand, showed him a pocket in which to hide them. He walked to the door, went out slowly and with apparent unconcern.

Lawson remained hesitant only a moment, then went to stare at himself in the mirror, to make sure that his own eyes, at any rate, would deceive him. In the full light, he saw only the wall behind him, slightly blurred as if by rising waves

of heat: he looked into his eyes, of which he saw only the black pupils clearly. He raised his arm, but did not see it rise. Finally, as quietly as possible, he left the room and closed the door behind him. The corridor, as he had expected, was empty.

Not being able to see his feet, he was at first afraid of stumbling, and he walked with undue caution. Once outside in the square of buildings, he kept as much as possible in the shadows, although he was convinced that it would take a keen eye to discern motion at his approach. The space-cruiser had already disappeared into the ground, and if the Consul were about, he still remained invisible. Lawson walked beyond the buildings into the darkness, struck out southward to familiar territory, from where he could obtain a good view of the observatory's back door. About halfway to the force-wall, surrounded by a heavy darkness through which he could see the dim outlines of the houses he had left behind him, he sat down on a boulder he had stumbled up against, and put Hermann's binoculars to his eyes.

CHAPTER XVII

Fighting Fire with Fire

● The surrounding, darkened landscape, leapt up clearly before him. The glasses, he thought, must have been a variation on Vane's infra-red telescope, because he saw the buildings as though they had been bathed in the weakened rays of a searchlight. Everything looked strange, something like the inverted negative of a motion picture film held to the sun, and the shadows were not so distinct as they had been.

It must have been time for one of the meals, as Lawson saw figures enter the dining room entrance. Even with the binoculars, however, he was unable to distinguish the features of those who had entered. He counted them, recognized the figure of Madeleine among them; was able to tell Hermann and Schulte by their bulk. Except for a difference in stride, he could not distinguish between Kortner and Berglied, but he guessed which was which, until he imagined that perhaps the two he had seen had been Alekhine and Guglielmo. Vane, Henderson, and Manning, from a distance, were so similar in appearance that Lawson could not tell one from another. By the time he had discovered, by his count, that all the scientists were within, his eyes were watering from the strain he had put on them, trying to place familiar features on the shoulders of men at a distance of a mile and a half. He blinked his eyelids rapidly, but, because of the cloak over him, was unable to rub them.

When he looked once again through the glasses, this time with less intensity, he saw, with some surprise, another person in the courtyard. Strain his eyes as he might, he could not make out the figure's identity. From where he sat, peering forward, it might have been any one of three, all of whom were similar in outward characteristics: Vane, Manning or Henderson.

But he had accounted for them already, he knew. The hair of all three was white, and, as a rule, they wore light-colored clothing. He saw, with a start, that the figure on which he had trained his binoculars had the same black protuberance on his forehead that he had seen on the Consul before, and a certain aura of light seemed to glow from it, so that the face was even further hidden from him than the faces of the others.

Again he lowered his glasses, but the darkness flowed in upon him then, and he could see nothing in the direction in which he looked. If he could only get closer . . . .

He scrambled to his feet, but as he approached the buildings, he perceived that he could no longer look over them into the square. He retreated again, and when he could again see into the courtyard, the figure in white had disappeared. He was at a loss; Hermann had told him to spy out the position, however, and he decided that the wiser course, for the time being, was to stay put. Uncomfortable though he was, he fought against the inclination to remove the hood from his face. The cloak

covered him completely, and he could not run the risk of being seen.

The scientists were slower in coming out of the dining room than he had expected, and he finally deduced that the evening meal must have been in progress. He knew, then, that the ultra-violet globes would wink out shortly. But when, much later, he made out the outlines of those drifting into the courtyard and going to their various rooms, he noticed that the lights were still in operation. He had not expected that, but in a way he was glad of it. His solitary vigil would be hard enough, he reflected, even under the faint light of the globes.

He had the impression that, should the light fail entirely, leaving him nothing on which to focus his attention, he would be unable to stay awake in the overwhelming heat of the force-wall's interior. Why the Consul desired to leave the globes shining throughout the night, Lawson could not understand; but he knew, as well as he knew anything, that there was some reason for it.

Shortly after the last of the scientists had left the dining room, Lawson once more put the binoculars to his eyes, swept the buildings with them. The square was deserted. Everything around seemed quiet, until he saw the back door of the observatory fly open and a gorilla emerge, look around him, then reenter the open door. He returned, this time followed by the same figure in white Lawson had seen before. Lawson strained his eyes behind the glasses, but saw only that the man wore the mysterious box on his forehead, a box which seemed to emit some sort of aura around itself, so that, even had he been closer, he would have been unable to make out the features of the person who must have been his antagonist.

Lawson watched with some perplexity, at first, as both the gorilla and the white-clad figure of the man walked into and out of the observatory. Each carried shiny lengths of metal, which they were setting up in the form of a tripod. Lawson again approached: this time there was nothing to cut off his closer view. When he had come to a point within a mile of the buildings, he thought that he could detect other movements, in the space between the observatory and the neighboring building. He looked closely, thought for a moment he could see Hermann's bulky form, but was not sure.

Someone had been there, however, as almost fifty yards from the observatory's corner, he saw a sudden flame, as if from a bursting canister; and a peculiarly clear gas floated free from it. Through it, Lawson saw the buildings greatly magnified. The gas had been poorly placed. It did not begin to spread in the direction of the Consul. Whoever had loosed it—and it must have been Hermann or a friend of Hermann's—could not have seen the Consul, and must have been guided solely by the "minute of silence." So far, Lawson had not experienced it. He therefore knew that he was completely out of range.

● As Lawson continued to approach the observatory, he became aware of the fact that he found it more and more difficult to keep the distant image of the white-clothed figure distinct. It faded, then leapt clearly into view, then faded again. There was almost a pulsing beat about it. He saw it clearly, vaguely, then not at all. He took several more forward steps, saw clearly once again, noticed that the Consul made a gesture toward his forehead with his arm. His whole figure seemed to throb for a few moments, then became completely invisible.

Lawson saw the gorilla, as if alone, but did not see the man's figure, even waveringly, until he had backed away some twenty paces. Finally, he reached a position where he could see plainly, after having passed through the period of flickering visibility, and here he studied the distant shape as best he could.

For perhaps an hour he stood in the darkness, racking his brain for an explanation of what he saw, discarding one improbable plan of action after another. As long as the Consul had that box, he was sure, there would be no way to approach him, and see him at the same time. Law-

son wondered about the box, was about to turn the thought away as insoluble, when the explanation of its power came to him. The little box blanketed sound within a certain radius and made its wearer invisible, though it did not make others near it invisible.

He was snatching at a clue that had baffled him for weeks, and the explanation suddenly dawned to him. *The Consul was not invisible, but made others think that he was.* The unthinking camera's eye could catch him. It must have been a form of hypnotism, Lawson was sure, of hyper-animal magnetism, terrifically accentuated by the workings of the black box; the Consul's thoughts, with the mechanical increase of the power of its waves, could blot out the thoughts of those around him.

This solution was terrifying in its very simplicity, and then Lawson saw the flaw in it. Its strength was its great weakness. The machine, controlled by the Consul's brain, could function only when the Consul himself directed it. It could not broadcast thoughts when the Consul did not will it to do so. Suppose he could catch the Consul asleep? Suppose he could catch the Consul without the box? Then for an opponent, he would have a man as other men, stronger, perhaps, and more ruthless, but a man who would have lost the paralyzing power inherent to his thought accentuator.

Lawson stirred, took a few paces forward. Again, the image before him faded, became indistinct. He immediately backed away until his vision was entirely clear, then turned from the observatory, and began walking further into the darkness. He planned to skirt the buildings, came up to the observatory from the front. Every now and then he looked back over his shoulder to make sure that the Consul was still at his work. Finally he was lost to sight, and Lawson walked toward the buildings.

When he reached the clearing, and, picking the deeper shadows, had started across the courtyard to the observatory, he heard a shrill, frightened scream coming from the building he had left several hours before. The unexpectedness of it brought him to a quick halt, and, forgetful of his invisibility, he ran into the doorway. The voice had been that of a young woman. It could have been none other than Madeleine's.

The door to Madeleine Henderson's room was open, and Lawson ran swiftly toward it. What he saw brought back the anger that had surged over him during his last encounter with Kortner. In the second that elapsed before he acted, Lawson saw the girl silently and doggedly trying to release herself from Kortner's arms. Kortner was savagely trying to kiss her on the mouth, his eyes staring with passion, and Madeleine was valiantly fighting back. Lawson hurled himself forward without waiting to see more.

Speechless with anger, he grasped Kortner under the chin, jerked his head away from the girl, spun him viciously around, and staggered his former friend with a smashing blow to the chin. Kortner grunted in pain and surprise, but his first look of rage was replaced immediately by one of abject terror. Lawson, about to speak, checked himself in time, as Kortner fell to the floor.

"Master!" Kortner cried. "Master! It won't happen again! I promise."

Lawson took a hurried step back as he realized Kortner's mistake, smiled grimly to himself at the humor of it. Kortner could not see him—thought, of course, that he, Lawson, was the Consul. But Lawson risked no word. He knew that the game might be up if Kortner should recognize his voice.

"I swear it!" Kortner said, with almost hysterical sincerity. "I swear it, Master!" He looked questioningly around him when Lawson, unseen, did not answer, and got slowly and fearfully to his feet.

Then, turning to Madeleine, who had wrapped her nightgown more tightly about her, he said, with a humility that was not entirely feigned:

"I'm very sorry." Lawson nearly struck him again when he saw the look, both fawning and threatening, on Kortner's

face. The wanton glance he gave her belied his words. The girl turned away in disgust, and Kortner, after darting glances to all corners of the room, walked out slowly. Lawson slammed the door behind him, pulled the hood back from his head, and turned to face the girl.

He was momentarily taken aback at the horrified expression on Madeleine's face.

"You!" she gasped. "You—the Consul!"

"Me?" he said, somewhat stupidly. "No, no." He explained quickly to her the circumstances under which he had acquired Hermann's invisibility suit, and how his attempted long-range spying on the Consul had failed.

"That damned Kortner!" he said. "I'm glad I happened to be passing when I did."

"I don't know how to thank you," the girl responded. "That horrible person! I'd rather kiss a gorilla." She shuddered.

There *was* a way she could thank him, Lawson reflected, looking at her lovely, flushed face. But, "business first," he said to himself.

● He began adjusting his mask.

"Well, see you in the morning," he said aloud. He started to pull the hood over his head.

"Wait," she said. The girl came to him, kissed him once on the cheek, and ran back before he could retaliate. He took a step forward, but Madeleine, her eyes shining, shook her head.

"No," she declared. "Not now. And if I were you, I'd make sure that Kortner didn't try to apologize again, this time to the real Consul."

"Good Lord!" Lawson exclaimed. He had not thought of that. As he pulled the hood over him again, however, he asked, hiding his blush behind the Hermannite:

"If I catch the Consul, will you—will you—"

"We can talk about that later," the girl said.

He closed the door behind him, having given her a last, lingering regard, and strode to the outer doorway. His head was whirling with emotion. "What a girl!" he said to himself. The kiss she had given him had thrilled him to the roots of his being.

At the moment he felt supremely confident of the outcome. He would catch the Consul, return in triumph to Madeleine Henderson, who would become Madeleine Lawson as soon as they could return to civilization, or near enough civilization to find someone authorized to perform the marriage service. And after that .... The future rose like a vision of eternal springtime before him. His dream, however, was abruptly shattered by Kortner's harsh voice behind him.

"Put up your hands, Lawson!"

He whirled, his heart in his mouth, to see Kortner, a .45 automatic in his levelled hand, facing him.

"You thought you'd get away with it, did you?" Kortner sneered. "Well, you almost did. If you'd let me alone, you would have. But you had to stick your nose in where you weren't wanted, didn't you? You had to hit me in the face, take the girl away from me, didn't you?"

Lawson remained speechesss. How, he wondered, could Kortner see him? If he made a sudden dash ....

"Put up your hands," Kortner said again. "I can see your left hand where you hit me—"

Lawson started, looked involuntarily at his hand. He must have broken some of the Hermannite, he guessed, in that left to Kortner's jaw, for he could hazily make out the outline of four knuckles, beginnings of sprouting fingers. Still he did not speak. Perhaps, after all, Kortner was bluffing. But his next words dispelled that illusion.

"As soon as I looked up I knew it was you," Kortner said, gloatingly. "I recognized that scar on your third finger. You had to hit me, didn't you? So I listened outside the door. And who was it spoke? Good old Jerry Lawson; my pal. That's who it was!" Kortner's voice was heavily sarcastic.

Lawson shrugged his shoulders, lifted his betraying hand over his head.

"All right, Kort," he said evenly. "What do you intend to do with me?"

Kortner's lip curled.

"I'm going to take you to the Consul, first," he declared. "And then I'm coming back here after the girl."

"You dirty scum!" Lawson said, his voice forced and shaking.

"All right, all right," Kortner said. "Keep that hand up where I can see it. And march over to the observatory. Hep!"

Lawson backed down the steps, his hand in the air. His mind raced. Was it possible that all his planning was now brought to an end? He hated to think so, but the muzzle of the automatic was a treacherous-looking affair, and Kortner seemed steady enough in his handling of it. He might stumble, throw himself at Kortner's feet. He had to risk something, he knew. Then, slowly, he lowered his left arm, inch by inch. He would put it in his pocket, make a strenuous leap into the darkness of the buildings.

"Keep it up!" Kortner barked. "It's hard enough to see you without that bobbing around."

Lawson, for one sudden, agonized moment, thought that no man had ever had such difficulty putting his hand in his pocket. He jumped into the shadows, and held himself tense. At the same time Kortner's gun spit fire and thunder twice, but the bullets went to the right. Lawson did not budge, and Kortner, his automatic swinging in a short arc, stood still, listening. For the first time in his life, Lawson wished that he had the gift of ventriloquism.

In the darkness, he felt his confidence returning to him. Kortner, at first plainly puzzled, began to show increasing concern as Lawson remained fixed and quiet. Lawson almost laughed when fright began to show in Kortner's eyes.

"Jerry!" Kortner called softly. "You know I was only kidding. Where are you?"

"Yeah?" Lawson thought. Only kidding, was it? He'd show Kortner some kidding that *was* kidding, as soon as he had the opportunity.

From the opposite doorway, he heard Hermann's heavy voice.

"What is?" the German rumbled. "Who shot?"

Lawson watched Kortner as the latter turned warily toward Hermann.

"I—" Kortner began. "I thought I saw—"

Lawson could imagine Hermann's eyes narrowing as he walked into the clearing. There was a sort of magnificent scorn in the German's deep tones when he spoke.

"You thought you saw, did you?" he asked. "What was it you thought you saw, young man?"

Lawson noted, then, that Hermann was fully clothed. The hour he did not know, but it must have been early in the morning, and that in itself was odd. So Hermann, too, had been working on leads of his own, he imagined. But even as these thoughts were going through his mind, he advanced toward Kortner, silently, one foot at a time.

"I thought I saw the Consul," Kortner said.

"The young man thinks he saw the Consul," Hermann said. "And where was this?"

"Why, right over there." Kortner gestured with the shiny, blue-black automatic, almost in Lawson's direction.

CHAPTER XVIII

The Consul, at Last!

● Then Lawson swung under the gun, grasped Kortner's right hand, and, with a sudden outrush of energy, bent his wrist in toward him, so that the automatic pointed to Kortner's stomach. He felt like striking wildly, but restrained himself, knowing that he probably would break more of the precious mirrors that kept him invisible. Kortner frenziedly wrenched back once, but evidently fearing a bullet from his own gun, stopped abruptly and panted with fear.

"Don't, Jerry," he pleaded. "Don't."

"What iss?" Hermann called.

"Let go of that gun," Lawson said sav-

agely. "Before I knock that lying tongue of yours down your throat."

He felt Kortner's grasp on the weapon relax, and he pulled it from Kortner's fingers.

"You, Lawson?" Hermann asked. "You were shot at for the Consul?"

"The dirty, double-crossing sneak!" Lawson said. "Yes, it's me. And what I'd like to do to that guy!"

"But the Consul!" Hermann protested. "You have seen?"

Lawson looked at Kortner before he replied.

"Here, Hermann," he said. "Take this gun, and keep this guy covered with it, will you?" He handed it to the German. "Yes, I've seen the Consul. And I'm going to get him. I thought for a minute that Kortner would stop me, but he won't now."

"The time is short," Hermann warned.

"I know. And I think there's only one sure way."

"And Herr Kortner?"

"Lock him up. Anything. Just so he doesn't get a chance to communicate with the Consul."

With that, Lawson spun on his heel and ran toward the observatory. At last, he hoped, he was about to come to grips with the Consul. That is, if the Consul and the gorilla were still outside, still working on the machine that might destroy the world. Lawson would slip into his room, unnoticed and unseen. He might not be able to see the Consul, but, at the same time, the chances were that the Consul would not see him.

Outside, he saw only the remotest possibility of approaching the Consul near enough to do him harm. And Hermann had said that there was little time left. Lawson wondered dimly what day it was. The darkness of the force-wall had been recent, but ever since, and to a far greater degree than before, he had felt himself to be living in a nightmare. He had lost track of the time of day, of the day itself: it was only an unhappy irony to think of daylight and sunlight in the perpetual brooding darkness of the Consul's headquarters.

When he reached the observatory doorway he became cautious once again; there was nothing to be gained by rushing headlong forward. Illogically enough, there was no immediate hurry.

The hallway, however, was deserted. Lawson had half expected to see one of the prowling gorillas standing guard before the Consul's doorway, but there was nothing to molest his invisible march to the Consul's lair. He paused long enough to make sure that the warm, clammy air was quiet. His ears told him that there was no "minute of silence." If the Consul actually happened to be near him, he was without the service of the mysterious black box that, to date, had made him invincible.

The room, too, Lawson noted as he swung the door shut behind him, was unoccupied. He stood still, looked into every corner, and felt that there was no one in the chamber with him. The furniture, for one thing, was distinct before his eyes, and there was no clogging silence in his ears.

Gingerly, he seated himself on the metal stool he must have sat on during his first encounter with the Consul; the Consul who had been up to that time unseen, who had been in all truth Vane's "invisible omnipotence." He had placed the stool so that he could watch both the door to the hallway and the door to Nézan's room, recently vacated by Kortner. There, his left hand thrust into the pocket of Hermann's shrouding cloak, he composed himself to wait.

Many things had happened to him in the last two months, he mused, as he sat silently in the sweltering atmosphere. Good heavens, he thought, had it been only two months since Madeleine Henderson had first come to his office in Washington? Two months? It seemed that he had become used to, in that short time, an entirely new order of things.

The flight to Casablanca seemed a last rational act in what had turned out to be an irrational world. He remembered his

first despair when he found himself unable to penetrate the force-wall, and the way he had rushed in to what might yet turn out to be disaster. Had he actually taken that flying trip to London with Vane? That memory entered into his mind, somehow, with less vividness than the nightmares he had dreamt—when was it? The night before? Two nights ago?

He shook his head, unconsciously lifted his hand to mop his brow, and was momentarily startled to discover that he was armless, and smiled in relief when he remembered the situation. He muttered to himself, wished that he could drink a glass of water. The room was abominably stuffy. He felt like sleeping, but resolutely fought off the idea. All his work, all his planning, would go for nothing if he let sleep overcome him.

Lawson became suddenly rigid: he heard a fumbling at the door-latch, held his breath as the door swung open. A gorilla stepped into the room, looked around him, sniffed once or twice. Lawson did not budge. He wondered whether the animal could smell his presence. Then, incredibly, the anthropoid took a step in his direction, with an almost humanly puzzled look on his ugly features. Lawson became again tense, but the gorilla did not advance further. He relaxed when the intelligent beast left the room.

● He scarcely had time to wonder at the unexpected visit before the door opened again. This time he saw no one enter, although he heard the lock click as the door swung shut. He didn't stop to analyze the fact that no "minute of silence" accompanied the Consul into his room, simply knew that he heard. Now, he reflected grimly, would be a good time to sneeze. As the lock caught, he heard a deep sigh, a sigh that held much of fatigue, of relief, and then the sound of several footsteps on the stone floor.

Lawson felt jubilant that he had not been perceived, and he felt a certain exhilaration rise up in him, an exhilaration that had something artificial about it. Several seconds passed. The room remained completely quiet. Lawson took short, open-mouthed breaths of air, so that not even his breathing would betray him. He became momentarily afraid that the Consul, whoever he was, would fail to remove the box that protected him. He felt chilled at the thought. Abruptly the dreamy, nightmarish state of his mind left him. Here, he knew, was stark and grim reality. He saw no one: not one of his five senses reported to him that another person was present.

And yet, in the same room with him, there stood the man whose power had turned the world's gold supply to lead overnight, the man who had threatened governments and nations, and who had destroyed twenty million Japanese as a scientist might destroy malignant germs in a test tube, a man who now threatened to kill one-tenth of the human race because the human race could not be brought about to regiment itself to his liking.

He rose to his feet, every nerve ready and alert. He had wanted to face the Lunar Consul once again, this time to see directly and with the eyes God had given him. He did not pause to analyze the conflicting emotions that swept over him. Subconsciously he noticed his heart's rapid pumping, and he was sure that the other occupant of the room could also hear it.

Lawson's eyes almost popped from their sockets when he saw appear, ten feet away, with his back toward him, the figure of a man. In the moment before he moved, Lawson saw that he was removing a shiny, black box from his forehead, that he was dressed in a light linen suit, and that his finely shaped head was covered by silken, white hair.

He was crouched, ready to spring, when the enigma faced him. Lawson cried aloud when he recognized the tall, well-built man who, he had been certain, could under no possibility have been the Consul.

● "Nezan!" he cried. "How—"

But he did not tarry to finish whatever question had popped to his lips. The man was either Nézan, incredible as it

seemed to Lawson, or one so like Nézan that he could not distinguish between them. The man, after one terrible start of surprise and dismay, whirled to the table on which he had deposited the black box, but Lawson was too quick for him . . . .

Almost invisible, unseen, at least, by the man with the box, Lawson leaped. Under ordinary circumstances he would have hesitated before taking advantage of an older man, but he did not hesitate now. Too much was at stake. In two bounds he had covered the intervening distance, had grasped the white-haired man by the shoulders and, with all his strength, wrenched him from the table, turned him, preparatory to himself grasping the box. Rather destroy its workings altogether, he thought, than allow the Consul one more access to it.

He was taken aback, at first, by the desperate resistance put up by the older man; he was far from dealing with the feebleness he had expected. He felt a grudging admiration for this white-haired person, even as he exerted his greatest pressure on a full Nelson in an effort to throw him to the floor. Suddenly the man relaxed in his arms, and, at the same time, unaccountably, Lawson felt his hold weakening. Some insistent command was pounding in his brain. He felt more and more compassion for the person he had sworn to take out of action.

But even as he was on the point of releasing his captive, Nézan redoubled his efforts at escape, and in that instant Lawson lost the pity that had come to him.

"So!" he said aloud. And to himself, "Even without the box, that animal magnetism." With a last powerful effort, he swung Nézan's head downward, then pulled him backward with a jerk, planting one knee in the other's back. He purposely released his hold. When his opponent staggered back, he threw the full strength of his muscles into an open-handed push to the other's chest. As his antagonist staggered again, he lashed out an unseen arm that spun him away.

Quickly, then, Lawson turned to the table, lifted into his hands the black box —which seemed surprisingly weightless— and perceived at a glance that its harness could slip easily over his head, and placed it so that it jutted from his forehead. As he adjusted it, he felt a sudden great strength flow over him, a strength that seemed to give him immense power and lucidity of mind. It gave him such confidence, indeed, that he felt no apprehension when he heard the ominous click of an automatic pistol's safety catch behind him.

He turned, to see without surprise or fear that the older man was standing before him, pistol in hand.

"Put it down!" Lawson said quietly. He realized, even as he spoke, that he had no reason to speak aloud. Nézan had heard, and obeyed his command before the words had had time to shape themselves in his throat.

Nézan—or Nézan's double—smiled a tired, haggard smile, a smile that held the slightest hint of ironic humor in it.

"Vane? So you win, after all," he said. He threw the firearm, negligently, in the direction of the bed. He sighed, shrugged his shoulders in Gallic weariness, and seated himself upon a chair, facing Lawson. His whole body sagged, as if from exhaustion, and Lawson guessed that, without the exhilaration of the box to aid him, Nézan was indeed a sick man. But then, too, he had been working at hard, physical labor throughout the night.

● Lawson stared, almost stupefied, at the other man. Now that the long-expected combat was at an end, now that he had reached the position he had hoped to reach, he felt chagrined, almost cheated, that his victory had been so easy.

"Nézan?" he asked. His question was full of doubt. Had he not seen, with his own eyes, a dead Nézan lowered into a shallow, Arab-dug grave?

"Ah," the man replied. "Mr. Lawson, excuse me. I had thought Vane my greatest enemy."

"You are Nézan?"

"Yes. I am Nézan." The voice was a

bit surprised. "*Bigre*, you see me, don't you? Ah, but *monsieur*, I think now I understand. You thought that I was dead, interred, no? *Monsieur*, no doubt you have admirable qualities, but perspicacity is certainly not one of them. You believed in my presence when you did not see me, no? Then why did you not disbelieve in my presence when you saw me?"

"Yes," Lawson said. "Silly of me, wasn't it?"

Nézan seemed to be recovering from the exhaustion that had at first marked him. He laughed, almost good-humoredly.

"You are a fool," he said to Lawson. "You are a fool. You have tried to bring to an end the greatest plan for world-betterment ever attempted since the Roman empire. Well, I wash my hands of the entire affair. I wished to place the Earth under scientific control. It would have been a blessing, *monsieur*. But I am a scientist, *monsieur*, not a politician. Perhaps, had I gone about it differently—but that is now in the past." His eyes narrowed. "But may I ask you a question, *monsieur?*"

"Certainly," Lawson replied.

"How, then, did you achieve your invisibility?"

"It is a physical process," Lawson said. "A system of mirrors which reflect not in front, but in back."

"Hermann," Nézan said softly. "A plodding, skillful worker, like all of the Teutonic race. I had not expected that." He lapsed into silence.

"This box I am wearing—" Lawson began.

"That is my secret," Nézan said stiffly. "It has great power, my box, but it needs replenishment. I will tell you, however, that it proceeds by greatly strengthening one's natural thought-radiations."

"I understand that well enough," Lawson said. "When I was stalking you in the hills, there always came a time when I could no longer see you. You willed that I could not?"

"I willed that no one could," Nézan said. "And of course, with some it works at farther distances than with others. It is one mind against another. You I could control within two hundred yards; Professor Vane perhaps at fifty. Ah, Vane. It must have been he who wirelessed the Legion, no?"

"I don't know about that," Lawson said. "But tell me, why did you destroy the world's gold?"

"That again is surely no secret," the Consul retorted. "Was not the demoralization the greatest that could be expected? Did it not give me immediately the upper hand? I think you make a great mistake, my friend, not to join forces with me. Consider once; a world without poverty or sorrow, a world where the only nationalism will be world nationalism, and where there will be no war, unless perhaps there comes a time of interplanetary war. My space-cruiser has taken me to the moon, *monsieur*, and there, there is no habitation. Perhaps the rest of the solar system is like that. It will be despotism, yes, *monsieur*, but only for a short time, until the Earth can once again shift for itself. But the despotism will be most benevolent. ["Two hundred million dead," Lawson thought.] Surely you can see that the Earth, well managed, will be happier and cleaner and a better place in which to live. You would not care to join?"

Lawson's answer was immediate.

"No, Nézan," he said. "I do not believe in your mechanized ideal of progress. I cannot believe in a despotism. And, too—" he smiled—"your offer does not flatter my intelligence very highly. How, for example, would I know that you would keep your word for all time to come? How would I know that you wouldn't kill me as suddenly and as ruthlessly as you have killed already millions of others?"

Nézan's lips curled angrily.

"I did not expect you to believe," he said. "But I had hoped that perhaps you would not be entirely immune to new and good ideas. *Eh bien*, you refuse. What do you intend to do with me, then?"

"Why, I'll turn you over to the French authorities," Lawson replied candidly.

"They'll be glad to lay their hands on you, I guess."

● Nézan nodded his head readily, drew his hand suggestively across the back of his neck. Lawson noted a peculiar gleam in his eye, a gleam that faded almost as it came to it, but, either because of inexperience, or because of his unfamiliarity with the workings of the black box, he received no inkling of Nézan's thoughts. Try as he might, he could not penetrate behind Nézan's quizzical face, to discover his actual mental processes. He knew that, within certain limits, he could now command and be obeyed, but he could not draw thoughts from under Nézan's hat.

As he wondered at that, however, he heard Hermann's strong syllables from the hallway.

"Herr Konsul!" the German said. *Herr Konsul!"*

Nézan bent an ironic glance in Lawson's direction.

"Come in, Hermann," Lawson directed.

The door swung open, and Hermann, with a tight-lipped smile on his face, walked in. He looked with slight surprise at Nézan, then, his smile expanding to a grin, swept the rest of the room with his eyes, and noticed the Consul's black box floating in the air.

"Young sir, may I congratulate?" he asked.

"Maybe later," Lawson said. "I think that now you'd better get Alekhine to lift the force-wall—among other things, I'd like a breath of fresh air. Put up a white flag so that the Legion won't start a bombardment, and then assemble everyone in the dining room. There are probably a few questions that need to be asked. Watch Nézan, will you, while I take off this celluloid suit?"

Hermann nodded, still grinning happily, and Lawson lifted the box from his head, quickly pulled off the cloak that had been so useful, and appeared to sight dishevelled, his face streaked with the perspiration the stifling air had brought out of him, his clothes rumpled and soggy.

"Whew!" he said. "I'm glad to get out of that." Then, before he mopped his face with a handkerchief, he once more placed Nézan's appliance over his head, and turned to Hermann.

"Your suit worked to perfection," he said.

"That is good," Hermann answered.

"Kortner?" Lawson inquired.

"He is locked in his room," Hermann said. "I came from there; thought I should see if anything had happened to you. I go now, to lift the force-wall."

Lawson was puzzled at the change that flitted over Nézan's impassive face at the mention of Kortner's name. There had been a tightening of the muscles, the immediately erased beginning of a smile. Lawson felt a qualm of uneasiness, but forgot it at once. After all, what could the self-styled Lunar Consul do to him, now that he had the box securely fastened to his own forehead?

To make assurance doubly certain, however, he picked up Nézan's pistol from the bed before he ordered him from the room. Nézan appeared not to be watching him, rather to be listening for some sound that did not come. They left the room, Nézan slightly in the lead. He stopped, for a moment, and Lawson behind him, heard a thin, piping whistle that seemed to come from Kortner's room. They walked slowly ahead.

As they reached the outer doorway, Professor Henderson stepped from his room, swayed back in surprise when he saw Nézan.

"Nézan!" he exclaimed. "I thought—"

He did not finish his sentence, nor did Nézan hesitate. Looking neither to right nor to left, Nézan walked down the steps into the darkness.

Henderson turned to Lawson, but Lawson, closely following the advancing figure with his eyes, did not explain matters.

"Later," he said. "You'll find out about it later."

Lawson stopped when he reached the upper step. It seemed somehow cooler. He looked up. Did he actually see scudding clouds above him? An instant later

he had no doubt. Rain began falling in torrents. It was cool, and he lifted his face to it. The stuffiness and heat had gone from the air. Alekhine must have already released the power of the barrier. A pleasantly cold breeze was blowing from the north.

Nézan, impervious to the elements, was walking swiftly in the courtyard's center, now about a hundred feet away from the doorway in which Lawson was standing. Lawson saw several of the scientists emerging from the buildings, astonished by the rain, pleased at its presence. Schulte and Manning together approached Nézan, Schulte evidently voluble with excitement and amazement, Manning completely unmoved.

Lawson could guess at the far-away look in his eyes, the entire lack of curiosity with which he greeted the supposedly dead man. Nézan, brushing by the two who had accosted him, glanced once over his shoulder, then started running.

"Stop!" Lawson cried. "Stop, Nézan!"

At his first cry, Schulte came to a halt, as if frozen, but Manning, unheeding, took several steps. Nézan, however, did not stop. He grimaced over his shoulder, his lips parting in what seemed to be a snarl. Lawson sprang from the steps. Had he allowed Nézan to get beyond the useful range of his thought-accelerator? He must have, because, until he reached the other side of the clearing, Nézan did not hesitate.

Lawson had twice tentatively raised his revolver, but there were other figures in the semi-darkness of the space between the buildings. He had seen Madeleine start back in horror when Nézan raced toward her. As, for the third time, Lawson raised the automatic, he heard the clang of metal on metal that preceded the quick rising of the space-cruiser, and the iron plates that covered its underground nest rose between him and the Consul.

● He cursed and bounded back to the top of the steps, but by the time he had reached a spot high enough to overlook the metal plates, the space-cruiser was already gaining altitude. Its golden sides glistened in the roaring, swishing rain. For one moment Lawson caught a glimpse of Kortner's leering face, thought he saw Nézan, smiling sardonically, and peering downward. With a tremendous rush, the cruiser shot upward.

Abruptly, Lawson remembered.

"Alekhine!" he shouted above the roar of the falling waters. "Alekhine! Force-wall, full! Force-wall, full!"

He saw, momentarily, Alekhine's face at the entrance to the laboratories. The Russian turned, at once disappeared from sight. Before Lawson could have counted ten, the low-hanging clouds were blotted from sight, and with the re-establishment of the barrier there came a soundless flash of flame, as if from some explosion, high up in the direction he had last seen the space-cruiser.

All of those who had made up the entourage of the Lunar Consul were seated in the dining room. It was shortly before dawn. Vane had been talking, the others listening.

"So I have no doubt that Nézan, and Kortner, and the two gorillas that they must have taken along, perished up there. The space-cruiser, I judge, must have been directly in the path of the terrible power of the force-wall's beam, and it must have disintegrated as sheer heat."

Berglied, still apprehensive, spoke.

"But don't you think there is a possibility that they may have escaped?"

"There is always that possibility," Vane said sardonically. "But there is every good reason to doubt it."

Hermann, at Berglied's cluck of relief, raised his voice.

"At the air-raid, friend Hammersmith, you were hinting at—?"

Hammersmith laughed, looked at Vane.

"It was Vane who radioed the Legion," he said. "I'm glad, now, that he did. But at the time it seemed simply idiotic."

"But one thing I would be pleased to learn," Vane said, "is how Kortner reached the space-cruiser."

"That was simple enough," Lawson ex-

plained. "He was 'locked' in Nézan's room, as Hermann thought. Well, Nézan's room, among other things, has four exits to it. One went to the hangar."

Lawson had felt a terrific preliminary shock when the Consul and Kortner had escaped him, but even he shrank from speculation of the manner of their death. "They have fried in a hell of their own making," Henderson had said. He began to realize now that the conspirators' death was perhaps best for all concerned. There would be no charges and counter-charges, no chance for mob-hysteria.

With the Consul's black box on the table before him, Lawson felt at ease, as if peace had been restored to the world. Manning, with his customary gravity and unconcern, had examined the exterior of the box, but had made no comment. Alekhine, too, had shown interest. He, with Henderson, had advised Lawson to destroy it.

"There is no one on earth who could be trusted with such a contraption," Henderson had said. Lawson stared at it; later, perhaps, he would do away with it.

The room became lighter, and the patter of the rain lightened a bit, then stopped entirely.

Vane rose slowly to his feet.

"The Legion ought to be here soon," he said.

Lawson heard sloshing footsteps hurrying through the mud outside, and Ahmed burst into the room.

"La Légion!" he cried. *"La Légion!"*

"We can turn over to them, don't you think?" Vane asked. Several heads nodded. The scientists arose from the table, walked to the doorway.

Lawson looked up from the black box when Madeleine Henderson also left the table.

"Madeleine," he said.

She turned to look at him.

"Madeleine," he said. "Come here."

He rose from his chair, but the girl did not move.

"Madeleine," Lawson said, "If you don't come and kiss me, here and now, I'll put on the little black box and *make* you come."

For a moment more the girl did not speak. A vivid blush suffused her features as she came to Lawson's side.

"All right, Jerry," she said, softly. "I can't very well get out of it, can I?"

She looked up at him roguishly as he put his arms around her.

THE END

THE INQUISITION OF 6061

By Arthur Frederick Jones

(Continued from page 446)

its way in among the towering buildings and to X. In that sudden flash, the crowds saw the man that was once X fall to the steps. He started to roll down them. Over and over he turned. The shouting was greater now. They were glad to see a man who would control their hearts, die. The heavens had answered J. The city and the world had learned a lesson, but it had killed a clever though too scientific mind that did not stop at fact, but brought in imagination. The world learned that perfection was a fine state, but that experiment beyond that might, and was causing a terrible thing to happen. J had caught the world in time.

THE END

Can You Recognize the Planets?

● IF YOU DON'T KNOW them by sight, an article which appears in the December issue of EVERYDAY SCIENCE AND MECHANICS will show you where to look for them, and why their apparent motions differ from their real motions. It will also tell you something about their brightness and comparative distances. Other astronomical articles to be found in this issue will interest every reader of science-fiction, because they deal with the future of the Earth. Read the December

Everyday Science and Mechanics

NOW ON ALL NEWSSTANDS

THE MOLE-MEN OF MERCURY

By Arthur K. Barnes

(Continued from page 491)

ly, Marchand, who had fallen curled up, lashed out with both feet and struck Gower squarely in the stomach. The stratagem was successful beyond his wildest hopes.

● Weighing a good bit less than one-third his normal weight, Gower could do nothing to stop his precipitate flight toward the brink of the vent. At the very edge, he checked himself momentarily, then lost his balance once more. He screamed wildly, reached out to seize some projection, and his hand convulsively clutched the end of the neutronium belt, became entangled in it. George Gower plunged into the volcano, dragging after him the belt and bomb-container, which had become caught in the crude buckle the men had fashioned for it. Only once did the gas fling his body up, jerking desperately as he strove to loosen the tangled belt; then the tremendous weight of it dragged him down faster and faster until he vanished from sight . . . .

From the bowels of the planet came the tremendous, prolonged explosion of hundreds of the deadly bombs. The earth rocked violently; myriad cracks appeared magically across the glassy surface of the crater. Steam, smoke, and flame shrieked skyward from the mouth of the volcano; great masses of red-hot lava and débris showered the landscape. The noise was deafening, stunning. The rock about the edges began to crumble and fall into the hole, adding the roar of avalanche to the din. Captain Marchand smiled quietly at it all, still clutching at his torn suit, and lay down to die.

But Marchand was not destined to die a hero's death that day. The half dozen hardened troopers who had watched the whole scene from above now came plunging down the long slide, aided by the cracks and splintered portions. Eager hands seized the captain and raised him upright. A hasty patch was slapped over

ly began the upward climb.

The terrible pitching and heaving of the ground beneath their feet continued undiminished.

An eternity of toiling, seizing at dangerously sharp projections and hauling with all strength, struggling and crawling along the slippery parts, negotiating deep crevices, eventually brought the group to the top of the crater. From them on, the journey was completed with comparative ease. Half-way back they were met by a party from the camp. Marchand spoke only once during all this time. One of the men asked:

"You both wanted to be the one to go, wasn't that it? We could see you fighting for possession of the belt."

Marchand glanced at the speaker strangely, then muttered light-headedly, through raw lips, "There is a tradition . . . ." Then, aloud, "Yes. Yes. Gower wanted to go alone. I protested. He—insisted." Marchand laughed harshly, bitterly, then lapsed into unconsciousness again.

● It is a matter of record that George Gower's strategy was successful in the extreme. From that day to this, no mole-man has been seen by human eyes in any part of the twilight zone of Mercury. But the ironic aftermath is a jest worthy of the devil's own pleasure. For the name of George Gower is set down in history and in legend as one of the greatest heroes of all time, synonymous with all that is high-minded and courageous and manly.

While Captain Marchand, retired from service because of disability, lived out his remaining years on a miserly pension, with a crippled arm and bitter memories for company, then died, a poverty-stricken and forgotten man.

● Verily, Time and her capricious Boswell, History, play strange tricks with the record of the centuries.

THE END

Science Questions and Answers

THIS department is conducted for the benefit of readers who have pertinent queries on modern scientific facts. As space is limited, we cannot undertake to answer more than three questions for each letter. The flood of correspondence received makes it impractical, also, to print answers as soon as we receive questions. However, questions of general interest will receive careful attention.

THE ASSOCIATE SCIENCE EDITORS OF WONDER STORIES

are nationally-known educators who pass upon the scientific principles of all stories.

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Yale University.

The Third Dimension

Editor, SCIENCE QUESTIONS AND ANSWERS:

1. Will you please give an explanation of the third dimension.

2. If enough force were applied to the back of an object so that the back part moved before the front, would the object disappear?

G. W. HINES.
Upper Darby, Pa.

1. The third dimension is volume. Objects of the third dimension (everything tangible) contain width, length and thickness. A line has length. A sufficient number of lines placed side by side form a plane, which has not only length, but width also. Several planes placed one upon the other form a cube, which has the three dimensions of length, width and thickness. An object must have these three dimensions to be tangible. A shadow has at times been said to be two-dimensional, because it has only length and width, and you cannot pick it up; but that is not so. In the first place, a shadow is not an object of any sort. A shadow is merely an area where light is absent because of the intervention of a material three-dimensional body between the light-source and the area beyond the body. Furthermore, if a shadow were a real thing, it would have three dimensions and not two, because the observer can only see the part of the shadow that impinges on a surface, while the shadow itself extends from the body to the surface where it can be seen, and that would be the third dimension.

2. Of course, it is practically impossible to apply enough force to an object so that the rear would move before the front to any appreciable degree. Theoretically, any one of several things would happen, and as one man's guess is as good as another's at the present time, no one can say which is correct. The applied force would probably first of all push the molecules of the object closer together, so that the object would become smaller in size, but be of a denser volume. And then, if the force were powerful enough, it might disrupt the atoms altogether, and the object would disappear, for it will have been disintegrated. A force such as would be necessary to make the rear move before the front to any noticeable amount might require a speed greater than that of light, and as nothing in our universe can exceed this limit, it would push the object into another universe, or "the fourth dimension," as some science-fiction authors prefer to call it.—EDITOR.)

The Molecules of Water

Editor, SCIENCE QUESTIONS AND ANSWERS:

I am a reader of WONDER STORIES magazine who would like to know why water expands upon freezing.

HARRY UMLAUF.
Kulpmont, Pa.

(The scientific explanation of the reason why water expands upon freezing is entirely too technical for this magazine, and only an advanced mathematician would be able to understand it. However, we will explain it in as comprehensible form as possible. The molecules of water, in their normal state, are in such a position that they are incompressible, but will literally roll over each other in any direction, and revolve readily, so that water flows and you can easily place your hand in it. When water is subjected to a low temperature (below 0 degrees Centigrade, or 32 degrees Fahrenheit) the molecules rearrange themselves into such a position that they interlock in a method that does not permit objects to pass readily through it in this ice form. The only way to account for the greater volume of ice is that when the molecules rearrange themselves upon being subjected to this lower temperature, they are in a uniform position which is not the case with water. While the molecules of water are closer together than in ice, they can easily be separated by the passing of an object, while the regularity of the formation in ice prohibits such an action.—EDITOR.)

Rays, Horoscope and Atoms

Editor, SCIENCE QUESTIONS AND ANSWERS:

I buy two of your magazines, WONDER STORIES and EVERYDAY SCIENCE AND MECHANICS, and I enjoy them very much.

As I am greatly interested in science, I would like these three questions answered in the SCIENCE QUESTIONS AND ANSWERS department of your magazine.

1. What is the source of ultra-violet rays?
2. Name the steps necessary in making a good horoscope.
3. What is the velocity of an atom of hydrogen?

PETER MIDDONI,
Buffalo, N. Y.

(1. Ultra-violet rays are emitted by all objects that are heated to incandescence. The greatest source of these rays is the sun, and the rays are vital to life.

2. The making of a horoscope comes under the heading of astrology. This belief (for it cannot be called a science) states that one's life can be prophesied by the positions of the heavenly bodies at the birth of the person. It is based entirely upon superstition, and as the question asked is not scientific, it cannot be answered in these columns.

3. The hydrogen atom has the velocity of 1694 meters per second. (There are 3.28 feet in a meter.) Because of this high velocity, hydrogen is a gas of the upper atmosphere, as its speed is too great to hold it to the surface of the earth by natural means. Oxygen, being a heavier gas with a velocity of 425 meters per second, remains at sea level. If it did not, life would not be able to exist on the earth. You can see by this that the heavier a gas is, the slower its molecular velocity.—EDITOR.)

Asteroids and Symbols

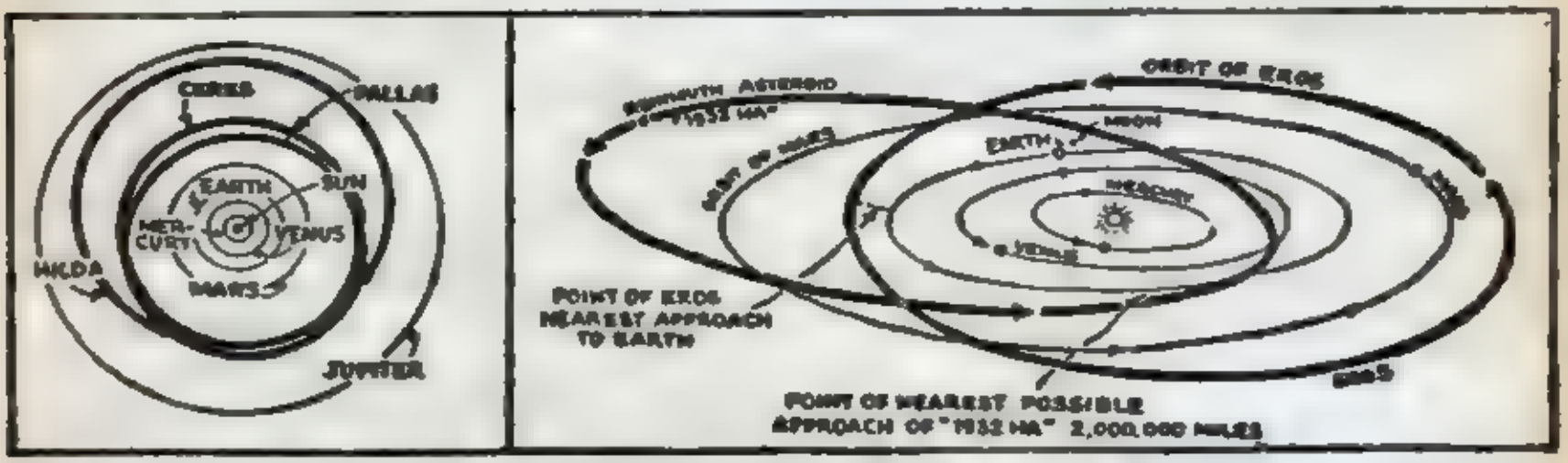
Editor, SCIENCE QUESTIONS AND ANSWERS:

Would you please answer the following questions in your most interesting column?

1. How did the asteroids originate?

2. I can understand that the letters in H_2O and CO_2 stand for hydrogen, oxygen, carbon and oxygen, respectively, but as I am not a chemical student, I do not know what the "2" stands for. Would you please explain this?

DONALD ARMSTRONG,
Detroit, Michigan.



The orbits of a few of the asteroids are shown above, to give an idea of their distribution in space. However, while the orbits of the larger planets are very nearly in the same plane (only those of Mercury and Mars, the two smallest, being inclined more than 1° to the Ecliptic or orbit of the Earth), the asteroids reach very high angles. The orbit of Pallas, for instance, is inclined 34° to that of the Earth. At the left, the solar system is drawn on a smaller scale. The two first asteroids discovered, Ceres and Pallas, are two of the largest, being each probably four hundred miles in diameter; and their average distances from the Sun are very nearly the same—about 257,000,000 miles, or 2¾ times the distance of the Earth from the Sun. Their orbits, as will be seen, interlock; but they do not come as close as might be supposed, because the place where Pallas crosses the plane of the earth's orbit is removed almost 90° from the place where Ceres crosses. If all the asteroids were in such close proximity, however, the "exploded planet" theory might be accepted; but Hilda, as shown here, goes out almost to the orbit of Jupiter, and the "Trojans," two groups recently discovered, revolve almost in the track of Jupiter. On the other hand, the asteroid "1932 HA," found last year by Reinmuth, actually comes within the orbit of the Earth, as shown in the larger-scale diagram at the right; and Eros comes only a few million miles outside it. There may be other asteroids outside the orbit of Jupiter, or within that of the Earth, though they are probably very small, if so.

Questions on Astronomy

Editor, SCIENCE QUESTIONS AND ANSWERS:

I would like to know:

1. What is the smallest planet in the solar system, and what is the largest?
2. How many asteroids are there?
3. Which is larger, a meteor or a meteorite?

ROBERT HENRY,
New York, N. Y.

(1. The smallest planet in the solar system is Mercury and the largest is Jupiter.

2. Over two thousand asteroids have been catalogued, but it is very likely that there are thousands of others in this belt that are too small to be seen by our most powerful telescopes. There may be many other celestial bodies that come under this category—for instance, we could not see the moons Phobos and Deimos (of Mars) if they belonged to Jupiter, because of the great distance of that planet, and the small size of the moons.

3. Meteorites are larger than meteors. When a body from space strikes the earth's atmosphere, its great speed in the dense gases causes friction, which starts to burn the body. Most of them are consumed by friction before they reach the surface of the earth. These are called meteors. Those that reach the earth before they are entirely consumed are called meteorites. The suffix "ite" changes the word meteor, an astronomical term, to meteorite, a geological term. "Ite" is taken from the Greek, and refers to the rocks of the earth. A meteor is also called a "shooting star."—EDITOR.)

(No one really knows as yet how the asteroids came into existence, and the matter is still one of conjecture. The most popular explanation has been that there was once a planet between Mars and Jupiter (the location of the asteroids), and a wanderer from space collided with it, disrupting it entirely into the many thousands of pieces that compose the planetoids—or this planet might have exploded from internal action, although it is unlikely. However, neither of these theories take in all the facts of the case, and lately, scientists have leaned toward a new one—that, when the solar system was formed, the strong counter-attraction of both Jupiter and the sun prevented a planet from forming in this region.

2. In H_2O, the figure signifies that there are two atoms of hydrogen to each one of oxygen in the compound of water, for which it is the symbol. In CO_2 (the symbol for carbon dioxide) there are two atoms of oxygen for each one of carbon.—EDITOR.)

IN this department we shall publish every month your opinions. After all, this is your magazine and it is edited for you. If we fall down on the choice of our stories, or if the editorial board slips up occasionally, it is up to you to voice your opinion. It makes no difference whether your letter is complimentary, critical, or whether it contains a good, old-fashioned brickbat. All are equally welcome. All of your letters, as much as space will allow, will be published here for the benefit of all. Due to the large influx of mail, no communications to this department are answered individually unless 25c in stamps, to cover time and postage, is remitted.

Science Wonder the Best

Editor, Wonder Stories:

Congratulations on the best issue yet.

The September-October issue is far supreme to any Wonder Stories yet published—mind, now, I said Wonder Stories—the former Science Wonder Stories will never be beaten. There was something—some vague something—in those stories that I cannot describe, that has never appeared since the amalgamation, until the present issue. The story, "Monsters of Callisto," seemed to contain that quality. It reminded me of the good old Science Wonder.

The author continually called Callisto a planet. Should not he have termed it a satellite?

"The Radio Terror" was one of the finest serials that has ever appeared. And we're waiting for the "corking good serial" that is to follow it. Bring it on—we're ready for it. That reminds us—why keep us in suspense?—give us a forecast of the next month's stories.

Paul is certainly improving—but I wonder if he knows that Park Place is in New York, and not in Chicago. (See illustration for "Last of the Swarm.")

Another feature that improved the magazine was the use of several illustrations for each story, as in "The Wreck of the Asteroid," published a few months back. Let's have more of this.

Thanking you for the notice in this issue, I remain a sincere supporter for "our" magazine.

Lewis F. Tossarca,
Winfield, Kansas.

(Perhaps you liked the old Science Wonder better than our present issues because the first science-fiction we read always makes a deep impression in our memory, and we sometimes get the erroneous idea that it was the best we have ever read.

Callisto is technically a satellite. However, Funk and Wagnalls' dictionary says that a planet is "a body of the Solar System that revolves around the sun," so our author did not make a mistake.

We are glad that you liked "The Radio Terror." Many of our readers had an opposite opinion of it.

Paul did not make an error when he put "Park Place" in Chicago. Most large cities have a street by that name. The story takes place in the future, and even if Chicago didn't have a Park Place now, who can say that they won't by the time the story is supposed to take place?—EDITOR.)

A New Theory

Editor, Wonder Stories:

I am writing you in regard to a theory I have always held in regard to the possible disappearance of the continents of Muir and Atlantis.

While I am not of the scientific world, I feel that this theory has been either ignored or has not as yet been suggested to your authors. I should like to see and read a story in one of your numbers built around the following theories.

In the prehistoric times, the polar zones were in all probability located in the regions of the Great Sahara and Arizona and California deserts respectively. This accounts for the aridness of these zones even today, and also of their barrenness of soil in regard to prehistoric vegetation.

In prehistoric times, the earth perhaps hung in the void, but was turned halfway around, thus accounting for tropical vegetation now found in the wastes of Siberia and Greenland and in some spots close to the South Pole.

In some prehistoric time, the close approach of some comet or other heavenly body or perhaps for literary purposes the theory may be advanced that the civilization of prehistoric inhabitants of these continents may have had to do with a great change in the position of our earth, causing it to turn around and begin to revolve as it does in our present day. Thus the continents of Muir and Atlantis became covered with ice and snow and its peoples disappeared. Then rose new lands which are now known as our present continents.

These theories may not be at all plausible or possible, but I should like one of your writers to take these ideas into consideration and build a story around them.

Lewis Lane,
Brentwood, Calif.

(We are afraid we cannot agree with our correspondent's ideas, as they run counter to the present accepted theories of terrestrial evolution.

It would be impossible here to give all the points in refutation of the theory, but any standard work on terrestrial evolution, such as for instance, "The Story of Mother Earth," will no doubt set our reader right on this particular problem.

According to Dr. Negaoka, President of the Osaka Imperial University of Japan, the axis of the earth is always changing its position. In the carboniferous period, the equator ran from the west of England through Central Europe, Siberia, Manchuria and the Pacific. The Central European districts which then were located near the equator had dense vegetation which finally formed the coal seams. It was also in that period that the mountains of Central Europe were formed, as the territory along the equator was in upheaval. Central Europe was formerly a sea, but by this swelling process, it was raised and became land.

Manchoukuo and Japan were formerly in the tropical zone, and therefore it is not at all strange that bones and relics of tropical animals are sometimes found in the neighborhood of Harbin or in some parts of Japan.

Later, in the tertiary and quaternary periods, the equator ran through the neighborhood of the Philippine Islands.—EDITOR.)

Back Numbers

Editor, Wonder Stories:

This June, I graduated from the local junior college and expect to enter the University of Iowa this fall. I have always enjoyed reading science-fiction, as all science interests me intensely, especially chemistry, in which I am majoring.

I need money very badly (Who doesn't now?) even though I have secured work and a fee exemption; therefore, I am using every means available to get as much cash as possible. Would you kindly print this letter in the "Reader Speaks," as I have on hand a large number of your magazines which I would like to sell.

My collection includes every monthly Wonder Stories from the first issue, June, 1929, to and including February, 1933.

(Continued on page 586)

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THE READER SPEAKS

(Continued from page 535)

I also have AMAZING DETECTIVE TALES (a Gernsback Publication) from the first issue, January, 1930, to the final issue of October, 1930.

I also have the first year (four issues) of WONDER STORIES QUARTERLY.

All of my magazines are in excellent condition, and I will be glad to send the entire collection to anyone for $[illegible].

Anyone interested, kindly write.

DONALD W. KAISER,
1228 North Sixth St.,
Burlington, Iowa.

(We have been unable to supply many of our readers with the older issues of this magazine, and they will be pleased to read your offer.—EDITOR.)

Time-Travel

Editor, WONDER STORIES:

In the October edition of WONDER STORIES, I noticed two letters on time-traveling. One of the gentlemen was of the opinion that time-traveling was "imbecilic." What has he to say to the fact that *I have actually traveled into the future? Also into the past?*

No, I am not a scientific crank, just one of the amateur radio operators at K6DV. Every time I hook up with some one in the States or over in Japan or China, I am traveling in time. The farther I get towards New York, the farther I go back in the past, and vice versa. Of course, this time-traveling is limited to communication of thoughts only.

It is absurdly simple, but I thought maybe some one would be interested in knowing that time-traveling isn't quite as freakish as it sounds.

I have been reading Gernsback publications off and on for the past five years and have enjoyed them immensely. They are "different."

Sincerely yours,

BERTRAM G. RYLAND,
Oahu, Hawaii.

(Thank you for your compliment in the last paragraph. We fear that you have a mistaken idea as to the nature of time-travel. Time-travel is the act of projecting one's self back to events that have already become history, or forward to those that have not as yet happened. The motions of the earth and the sun have no effect on time itself, whatsoever. Divisions of time are entirely man-made. Let us illustrate this point. There was a school teacher in Ohio who lived near the Eastern-Central time boundary. The he taught in was just on the other side of this belt. He started to school at 7:30 and arrived there at 9:00. It took him one-half hour to walk the distance! Coming home in the evening, he left the school at 4:00 and arrived home at 3:30! Would you say that he got home before he started?—EDITOR.)

An Author's Challenge

Editor, WONDER STORIES:

Well, I'm still waiting for 'em; those readers who are going to "take issue with me on the scientific possibilities of some of my incidents" in "Men of the Dark Comet." I hereby challenge anyone to prove anything in either of my two stories "impossible." And let no one enter the lists who is not prepared to have his or her arguments proved ridiculous, for I have girded up my loins and am ready for battle.

Personally, I hold that a good story should always outweigh considerations of strict scientific accuracy, for what the scientists tell us today they will be contradicting tomorrow. Furthermore, many an "impossible" incident would become unobjectionable if the author put in a long and tedious explanation, spoiling the story in doing so. How many a delightful idea is banned because the scientific conceptions of the moment, changeable as a woman's fashions, are against it! For instance, stories of life on atoms seem now to be taboo, but I am writing one in defiance of the scientists. Above all things, what is wanted is brightness and originality, and new readers will not be attracted to science-fiction by that dry "realism" that gets *all* its facts out of text-books.

At the same time, stories should always be plausible.

I believe I am the longest-standing science-fiction fan amongst your readers. I go back to 1919, when,

as a boy of 14, I used to read avidly the ELECTRICAL EXPERIMENTER which published an occasional story. If my memory serves me right, Mr. Gernsback was the editor and the mag ultimately became EVERYDAY SCIENCE AND MECHANICS.

You should publish an English edition of WONDER STORIES, for science-fiction should be international.

FESTUS PRAGNELL,
Southampton, England.

(We hope that some of our readers will accept your challenge. We believe you have the right idea when you state that "what the scientists tell us today, they will be contradicting tomorrow!" Few abstruse scientific theories seem to last forever, and where one great scientist has one idea, another has a very different conception. The greatest themes for science-fiction come under this category—time—the universe—the atoms, and innumerable others. We try to keep all of our stories plausible.

The ELECTRICAL EXPERIMENTER was one of Hugo Gernsback's first publications; it became SCIENCE AND INVENTION in 1920.

We find no necessity in publishing an English edition of WONDER STORIES. Our American magazine is sent overseas, and should not be difficult to secure. And then, those of our English readers that subscribe, receive their issues promptly.—EDITOR.)

Bouquets and Suggestions

Editor, WONDER STORIES:

Let me congratulate you on your October issue. In my opinion, it is one of the best issues you have ever published. The serial was nothing special, but it was very good.

"Monsters of Callisto" is the best story I have ever read for quite a while. It holds your interest from beginning to end. Let's have more from that author.

"Spheres of Death" was very good. Why don't you have the author write a series of stories about the efforts of Ghangistan to conquer the English?

"The Moon Tragedy" was another excellent story. The author made his characters and their actions seem very real.

"The Last of the Swarm" was also very good.

Now I would like to offer a few suggestions:

1. Try to give Paul a cover with plenty of complicated machinery. He is a wizard at drawing them.

2. Try to get some stories by A. Merritt, the only author whose imagination surpasses that of Clark Ashton Smith

Though I am but 15 years old, I have read your magazine from the first issue and enjoyed every copy.

STARK ROBERTSON,
San Antonio, Texas.

(Our younger readers are generally very critical, but here is a letter of appreciation that encourages the editors.

We agree with you that Paul is a wizard at drawing fantastic machinery, and his imagination is unbounded. We will continue to let him draw illustrations of this type.

Write to us and let us know how you like the mag in its new vine.—EDITOR.)

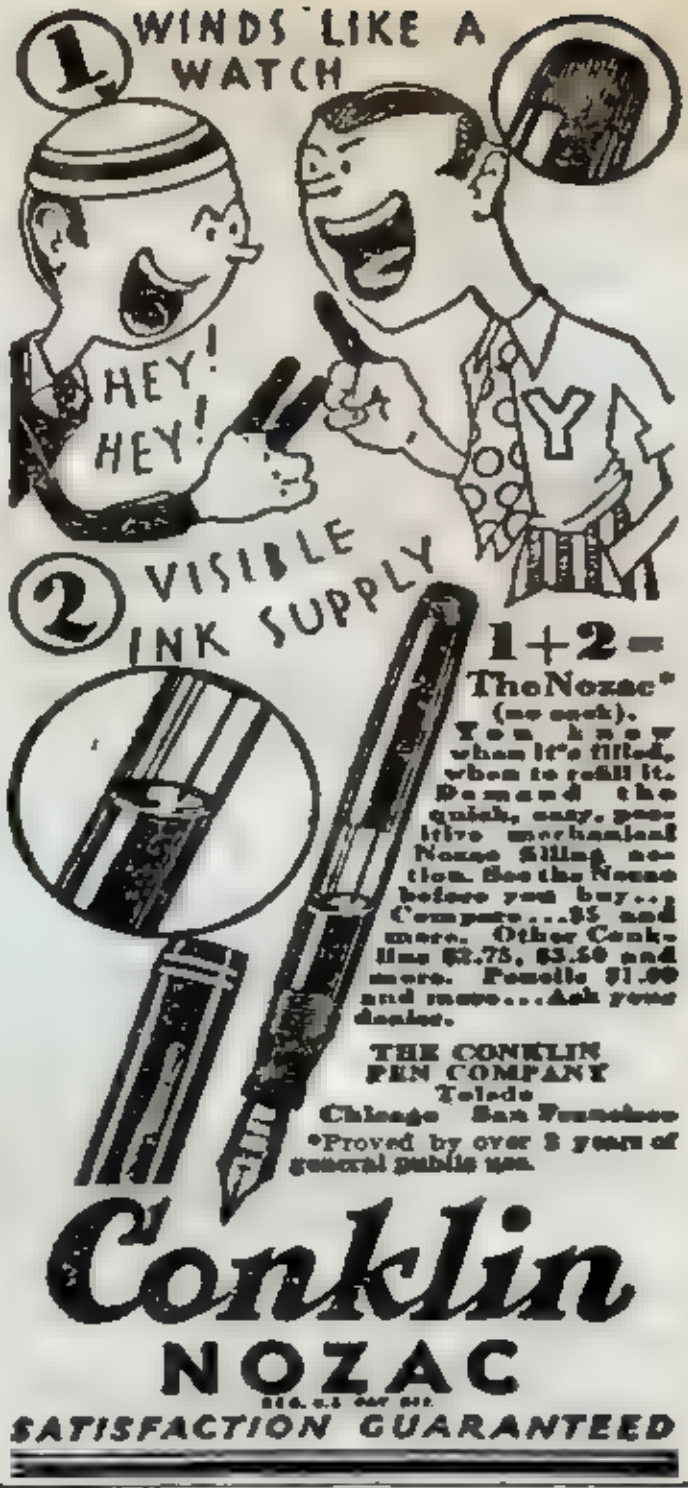
Are Our Stories Degenerating?

Editor, WONDER STORIES:

I purchased the first SCIENCE WONDER STORIES ever published and have read them ever since. The magazine has taught me as much science as did my high school science course, and I majored in science. I consider your magazine the best science-fiction magazine on the market, although I enjoyed and enjoy the others also. Paul is, in my opinion, the best artist employed by any scientifiction magazine.

Now for the adverse criticism. The stories are degenerating. I realize that the standard set was a high one, but I don't believe it was an impossible one by any means. The stories *don't* abound in love interest, but neither do they contain the science that did the former ones. As literature, they are interesting; as scientific narratives, they fall far short of those Keller, Verrill, and E. E. Smith used to write. Another "brick-bat": *please* quit saving the earth. I'm certain that the earth, if invaded by beings from other planets, possessed of vastly superior science, would

(Continued on page 540)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"	III.	Nervous System of Female
"	IV.	Skeletal System
"	V.	Muscular System (Posterior)
"	VI.	Muscular System (Anterior)
"	VII.	Vascular System
"	VIII.	Respiratory System
"	IX.	Digestive System
"	X.	Male Genital Organ in Detail
"	XI.	Female Genital Organ in Detail
"	XII.	Cross-Section of Pregnant Female Body with Child.

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THE READER SPEAKS

(Continued from page 519)

be rather easily conquered. Imagine a war between the white race and the yellow.

A little comment for contributors to "The Reader Speaks"; I enjoy reading your criticism, but *don't* make them so vehement. No one objects to your holding opinions or expressing them, but you needn't condemn others for differing with you. Prejudice is allowable, intolerance is (or should be) obsolete. A word to the wise.

Good luck to you in your fifth year, and may your stories improve.

EMANUEL MINEM,
Cleveland Hts., Ohio.

(You are not the first one to tell us that our magazine provides a miniature scientific education in itself, which is the purpose of WONDER STORIES, along with our attempt to broaden the minds of our readers, so that they will erase the word *impossible* from their vocabulary.

Although we do not believe that our stories are degenerating, we do believe that you *think* they are. This can come about in various ways. You may have read so much science-fiction that it is for a time becoming boring, but if you did not continue to be a fan, you would probably soon realize that there was something missing in your life, and you would be back with the "gang" in a short while. You must realize that science-fiction is evolving. We have found that our readers want more story interest than pure text-book science in their stories, than they did five years ago. You must also realize that we try to please the majority of our readers, and it is no easy job.

You seem pessimistic about the fate of the earth upon the invasion of creatures from another world. Man likes to feel superior in this universe, and he should be able to conquer anything else in existence. If we printed too many stories in which mankind was annihilated, we fear that many of our readers would say "What's the use of it all?" and they would go off and commit suicide. And if they did that, they would not be able to purchase WONDER STORIES any more! And what a catastrophe that would be!

We print many letters with which we disagree, but we let our readers argue out the point for themselves. If a letter is interesting, it has a good chance of getting into these columns.—EDITOR.)

Covers and Artists

Editor, WONDER STORIES:

Here it is the 31st of August and I should be getting my October WONDER STORIES. Now what do I find? I have to wait another month to get the next issue. If you try that trick again, I'm going to stop my subscription and get your rival magazine. You wouldn't like *that*, now would you?

Speaking of that other mag, *don't get a modernistic cover like it has.* I never used to waste my quarters on it, and now I'm glad I didn't. If you start making covers like that, I swear I'm going to quit.

I notice that Wesso stopped drawing for the other mag and is now illustrating for the "Daily News." Has the depression hit him? Why not take him on? He and Paul are the two best artists.

Also, don't forget E. E. Smith and J. W. Campbell, Jr. We need more stories by them to pep up our mag.

MILTON S. ROTHMAN,
Philadelphia, Pa.

(WONDER STORIES is back on the monthly list again. We combined a few issues last summer, because of the deficiency of sales. We hope that it will not be necessary to repeat this terrible catastrophe next year, for we wouldn't want to lose you as a reader.

You can be assured that we will not use modernistic covers. Our readers prefer Paul's cover illustrations. How do you like the work of our new artists, particularly Winter? We believe he has an excellent technique for this type of work.—EDITOR.)

NEXT MONTH!

"The Exile of the Skies" by Richard Vaughan

—a tremendous interplanetary novel

We "Can Take It"

Editor, WONDER STORIES:

This is our first letter to WONDER STORIES—probably you'll hope it's the last. However, don't let this dark hint dampen your youthful ardor and enthusiasm—

In the first place, we must raise our voices in a howl of protest against Paul's fantastic contortions of the human anatomy and physiognomy. His people always look like flabbergasted carbon copies of boy scouts—Lord! Does he think the human race lives in knickers? However, his machinery, ghastly effects and vivid explosions surpass by a long shot the best attempts of any of his rivals.

Another kick—(can you survive it?) We have been reading WONDER STORIES for two years and have noticed a steady decline in the quality of the stories (as well as the paper they are printed on—but, we realize, dear editor, that the depression is not your fault.) It appears to us that you are steadily losing many of your best authors. Where are Leo Esbach, John Bertin, A. Rowley Hilliard and Capt. Meek secreting themselves in this crisis? We don't think you made any mistake in giving us a relief from John Taine and his subtle implications as to the where and why of the story (?). His "Time Stream" was about as clear as the proverbial primordial slime.

Please, dear editor, will you kindly enlighten our abysmal ignorance as to the brand of dope Clark Ashton Smith uses? "The Eternal World" is certainly an excellent revelation of a hashish guzzler's mental processes—of all the imbecilic drivel!!! His manipulation of superfluous verbiage, while qualifying him perfectly for a position as secretary of an insane asylum, certainly has no place in a magazine of scientific fiction. Understand, we're not crabbing about the use of apt or colorful expressions where they serve to strengthen and clarify description—it's these wise birds who think they can string a lot of weird, onomatopoetic adjectives and hackneyed phrases together and dish out the resultant drool as pure science, that get us.

And yet another dynol pellet to sling, dear editor—Are you of the opinion that we were just born yesterday? Are you under the delusion that your alleged "intelligent" young readers have failed to see through your clever little scheme of turning your "pulp" into a bi-monthly under a benign pretense of obligation to your public? (Again depression rears its ugly head and again we offer our condolences as we realize your limitations.)

And why, oh, why do you insist upon dragging a heroine on hair-raising expeditions to the ends of infinity, so that "curtains" may find her doing the boa-constrictor act around Handsome Hero's brawny neck?

And now for a pansy—(we disdain the plebeian appellation of rose). A few good yarns have wormed their way into your columns. May the standard of perfection reached in such stories as, "The Time Conqueror," "The Man Who Awoke," "The Revolt of the Scientists," "Reign of the Star Death," and "The Man Who Shrank," serve as an inspiration to future authors.

Once again let the pansy's welcome odor assail the editorial schnozzle—We two chronic gripers actually approve of—actually *like* the discussions in your "Science Questions and Answers." They are really worth while and you have our enthusiastic support in any further efforts to enlarge and improve this column.

Before we close this delightful (?) little missive, we want to tell you how much we enjoyed friend Epaminondas' latest masterpiece, "The Expanding Universe." His clever analogy is interesting and extremely instructive. However, we wish that he'd shed that asinine *nom-de-plume* of his and dig up a picture of himself that is a little less reminiscent of a jelly fish in the final stages of putrefaction. At any rate, he's a pip and let's hear more from him.

As a precautionary measure, lest these last few complimentary remarks go to your head, we again proffer a bouquet of stink-weed. Something drastic ought to be done about the indiscrimination you show in your choice of ads. We certainly don't enjoy feasting our eyes on the blatant ballyhoo spread, like rancid butter, over every available blank space. Pseudo-psychology, lurid portraits of living masses of muscular protoplasm, and reams of cacophonous copy declaring the benefits derived from the diligent perusal of certain pernicious literature, have no charms for us, and would certainly scare away many prospective subscribers.

Also, the readers' contributions to the "Moon Doom" showed a decided lack of science knowledge and application, while the editorial staff should have stressed more strongly the necessity of rational science in a contest of this type. The very idea of accepting—yes, even printing—an amateurish story in which an air-

(Continued on page 542)

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THE READER SPEAKS

(Continued from page 541)

plane flits blithely around, four hundred miles or so above the earth, its propeller blissfully cleaving the airless void!!!! This is only one of the most obvious faults the story boasts, and it certainly is a reflection on the mental alertness of science fiction readers.

Although our letter would seem to indicate that we have renounced WONDER STORIES forever, we hope that you will take these rather caustic comments as constructive, rather than destructive, criticism, since we have derived much enjoyment from WONDER STORIES in the past, and have been indebted to it for arousing our interest in the modern sciences.

C. FERRY,
R. ROGERS,
Frankford, Michigan.

(We are glad to publish the pleasant missive of Messrs. Ferry and Rogers, just to show you that we "can take it" and also to show that not everyone of our readers is heart and soul sold on Mr. Paul's art work.

If an explanation can be made, it might be said that if you have ever been to the field museum and looked at one of the reconstructions of the Neanderthal [illegible] the pre-historic man also looks a bit fantastic, as a matter of fact, a whole lot more than Mr. Paul's men.

The paragraph regarding the magazine as a bimonthly during the summer is not clear. The fact remains that during the past two [illegible] the readers have not bought fiction magazines the way they used to and many publishers were compelled to combine issues during the summer. Of course this is now over and the magazine with this issue resumes its monthly career. It is to be hoped that conditions next year will not make it necessary to combine issues.

The other paragraphs of our correspondents speak for themselves and we leave it to our readers to answer them rather than to attempt the answers ourselves.—EDITOR.)

CLASSIFIED ADVERTISEMENTS

Advertisements in this section are inserted at the rate of ten cents per word for each insertion—name, initial and address each count as one word. Cash should accompany all classified advertisements unless placed by a recognized advertising agency. No less than ten words are accepted. Advertising for January, 1934, issue should be received not later than November 6th.

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[illegible]

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Wonder Stories in Egypt

Editor, WONDER STORIES:

I have been a reader of your magazine for only six months. One day, I found a copy of WONDER STORIES in my English mail, and from that time I have been a regular reader. I think I can safely say that 50 men in my battalion read the copies I have, and I am sure that if copies could be procured in Egypt, you would have quite a large following.

"The Man Who Awoke" I reserve as the best story and I think it portrays very well the probable development of mankind, and its machines. My poor knowledge of science does not place me in a position to find flaws in the theories of the stories I read. In any case, I read them for the stories only. I look forward to the time when I shall read a continuation of "The Man Who Awoke," and find Winters and Bengue working together. The cover is very well executed, and may I add that I have yet to see a quarterly issue of WONDER STORIES. Do you print one?

H. G. PRIVATE,
Egypt.

(We are pleased to hear that several men of your battalion read our magazine. WONDER STORIES is read by people in all walks of life—from professors to school-boys, and from scientists to ministers. If you cannot procure enough copies of WONDER STORIES in Egypt, it is possible for you and your friends to subscribe, and you will never miss a copy. Most of our readers seemed to enjoy the stories you mention liking.

We did publish a QUARTERLY, but it was discontinued with the Winter 1933 issue. When times improve, we will resume publication of the same.—EDITOR.)

STATEMENT OF OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912

Of Wonder Stories, published monthly at Springfield, Mass., for October 1, 1933.
State of New York
County of New York ss.

Before me, a notary public in and for the State and county aforesaid, personally appeared Irving Manheimer, who, having been duly sworn according to law, deposes and says that he is the business manager of the Wonder Stories and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Continental Publications Inc., Myrick Building, Springfield, Mass.; Editor, Hugo Gernsback, 98 Park Place, New York; Managing Editor, Charles D. Hornig, 98 Park Place, New York; Business Manager, Irving Manheimer, 98 Park Place, New York.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.) Continental Publications, Inc., Myrick Building, Springfield, Mass.; Hugo Gernsback, 98 Park Place, New York; I. S. Manheimer, 98 Park Place, New York.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state). None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

I. S. MANHEIMER.
Signature of Business Manager.

Sworn to and subscribed before me this 10th day of October, 1933.

(SEAL) MAURICE COYNE,
Notary Public.

(My commission expires March 30, 1934.)

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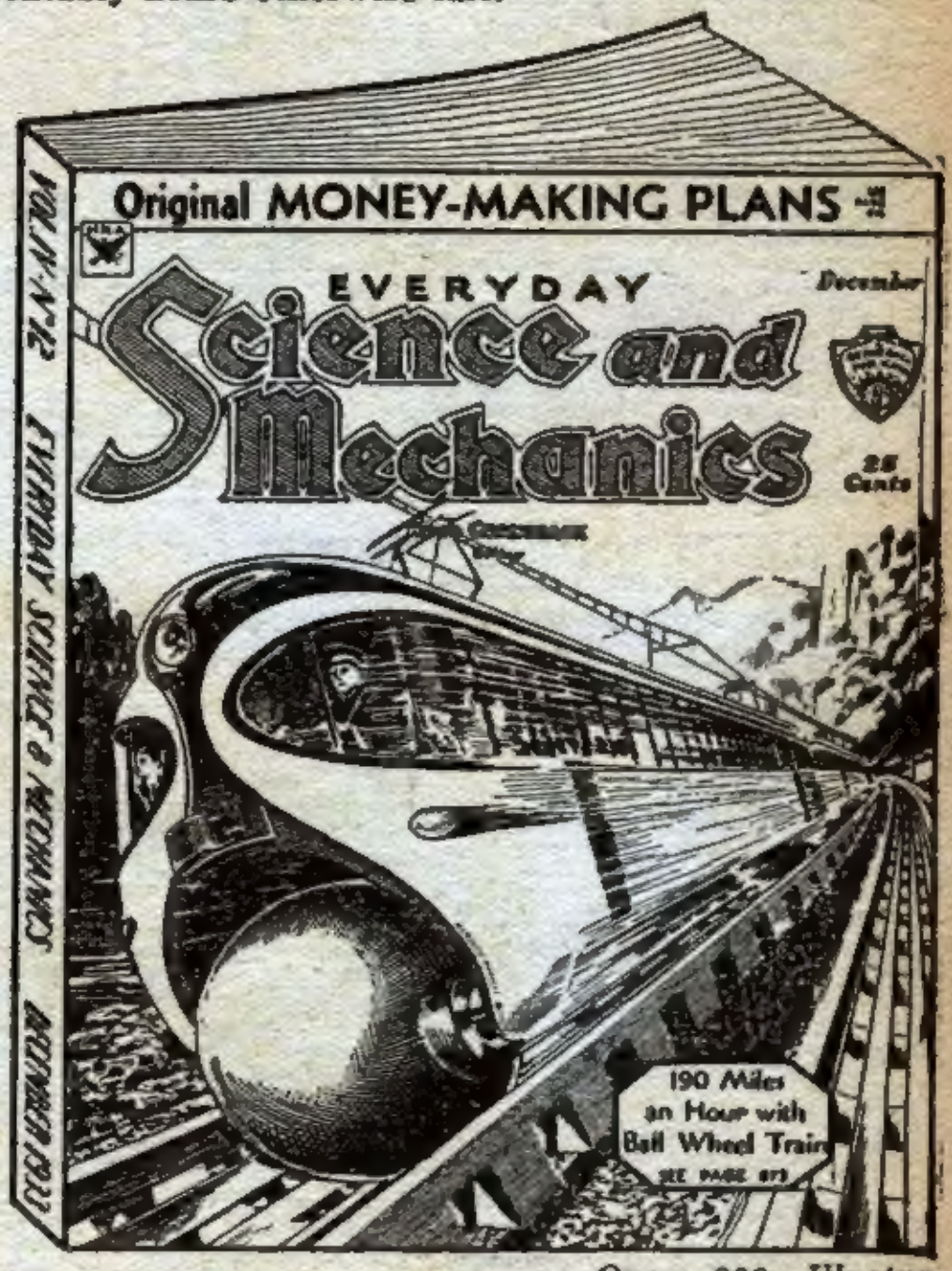

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